DOCTOR OF PHILOSOPHY

Internet financial reporting in Arab MENA countries an institutional perspective

Eltkhtash, Salem A.

Award date:
2013

DOCTOR OF PHILOSOPHY

Internet financial reporting in Arab MENA countries

an institutional perspective

Salem Eltkhtash

2013

University of Dundee

School of Business

Accounting and Finance

Internet Financial Reporting in Arab MENA Countries: An Institutional Perspective

Salem A. Eltkhtash

A Thesis Submitted to the University of Dundee in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

December 2013

In The Name of Allah

The Beneficent The Merciful

Dedication

I wish to dedicate this thesis to my beloved mother (May Allah's mercy be upon her) who, so sadly, passed away just before I finished upon this PhD journey, with all loving memories.

I wish also to dedicate this thesis to my father (May Allah's blessings be upon him) who taught me that the best kind of knowledge to have is that which is learned for its own sake.

This thesis is also dedicated to my beloved wife Balgeis, and my daughters Zahia, Shahed, Iman, Baria, and Asyia, for all of their support, inspiration, and love. Through our loyalty to each, we become stronger, we Stand Together.

Table of Contents

Abbreviations

ACA	Association of Certified Accountants
ADX	Abu Dhabi Securities Exchange
AICPA	American Institute of Certified Public Accountants
ASB	Accounting Standard Board
ASCA	Association of Syrian Certifies Accountants
ASE	Amman stock Exchange
ASSC	Accounting Standards Steering Committee
BCGC	Bahraini Corporate Governance Code
BDA	Bourse D'Alger
BHB	Bahrain Bourse
BSE	Beirut Stock Exchange
CAO	Central Auditing Organisation
CIA	Central Intelligence Agency
CIPFA	Chartered Institute of Public Finance and Accountancy
CMA	Capital Market Authority
CSE	Casablanca Stock Exchange
DFM	Dubai Financial Market
DIFX	Dubai International Financial Exchange
DSE	Damascus Securities Exchange
EDGAR	Electronic Data Gathering, Analysis, and Retrieval
EFSA	Egyptian Financial Supervisory Authority
EGX	Egyptian Exchange
EPS	earnings per share
FASB	Financial Accounting Standards Board
GAAP	General Accounting Accepted Principles
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GNC	General National Congress
GNI	Gross National Income
HTML	Hyper Text Mark-up Language
IAS	International Accounting Standards
IASB	International Accounting Standard Board
IASC	International Accounting Standard Committee
ICAEW	Institute of Chartered Accountants in England and Wales
ICAI	Institute of Chartered Accountants in Ireland
ICAS	Institute of Chartered Accountants of Scotland
ICMA	Institute of Cost and Management Accountants
ICT	Information Communication Technology
IFAC	International Federation of Accountants
IFR	Internet Financial Reporting
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
ISX	Iraq Stock Exchange
JACPA	Jordanian Association of Certifies Public Accountants
KSE	Kuwait Stock Exchange
LAAA	Libyan Accountants and Auditors Association

LCC	Libyan Commercial Code
LINTC	Libyan Interim Transitional Council
LSM	Libyan Stock Market
MAS	Moroccan Accounting Standards
MC	Market Capitalisation
MDSRC	Muscat Depository and Securities Registration Company
MENA	Middle East and North Africa
MIT	Ministry of Industry and Trade
MSM	Muscat Securities Market
NAC	National Accounting Council
NASDAQ	National Association of Securities Dealers Automated Quotations
NIE	New Institutional Economics
NIS	New Institutional Sociology
OIE	Old Institutional Economics
ONA	Oman News Agency
PCMA	Palestine Capital Markets Authority
PDF	Portable Document Format
PEX	Palestine Exchange
PMA	Palestine Monetary Authority
PwC	PricewaterhouseCoopers
QE	Qatar Exchange
ROA	Return on assets
ROE	return on equity
SGBV	Societe de Gestion de la Bourse des Valeurs
SPSS	Statistical Package for Social Sciences
TA	Total Assets
TSE	Tunis Stock Exchange
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
UNICEF	United Nations International Children's Emergency Fund
USA	United States of America
WWI	World War 1
WWW	World Wide Web
XBRL	eXtensible Business Reporting Language
XFRML	eXtensible Financial Reporting Mark-up Language
XML	eXtensible Mark-up Language

List of Figures

List of Appendices

Acknowledgments

First and above all, I sincerely thank Allah, my God, The Most Gracious, The Most Merciful for granting me the capability to complete my PhD, and for often showing so many good people to me to help with my thesis.

Undertaking this PhD has been a truly life-changing experience for me and it would not have been possible to do without the support and guidance that I received from many people.

I want to express my deeply felt thanks to my supervisors, Professor Christine Helliar and Dr. Louise Crawford, for their warm encouragement and thoughtful guidance throughout the duration of my PhD. I could not have asked for better role models, each inspirational, supportive, and patient. I could not be prouder of my academic training and hope that I can, in turn, pass on the research values and the dreams that they have given to me.

Special thanks to the staff at the University of Dundee for their support, guidance and helpful suggestions. Their guidance has served me well and I owe them my heartfelt appreciation, especially, Theresa Dunne, Bruce Burton, David Power, Dick Brown, and David Collison.

I am also indebted to all the PhD students at the school who I have had the pleasure to work with. They have been an invaluable support during all these years, special thanks to Abdulaziz, Abu baker, Ahmed, Ali, Chanda, Issa, Maree, Mohammed, Moftah and Yasser.

I would also like to thank my parents for their support and patience; their love provided my inspiration and was my driving force. My wife, Balgeis, whose love and encouragement allowed me to finish this journey; she has given me her unequivocal support throughout, as always, for which my mere expression of thanks does not suffice; she really deserves my heartfelt "thanks my darling". All members of my extended family; and here I would express special thanks to my brother Ibrahim for everything he has done to me. Finally, I warmly thank and appreciate my mother-in-law, Baria, for her support and patience.

Declaration

I hereby declare that I am the author of this thesis: that the work of which this thesis is a record has been done by myself, and that it has not previously been accepted for a higher degree.

Signed……..…… Date……..…….

Mr. Salem A. Eltkhtash

Certificate

We certify that Mr. Salem A. Eltkhtash has worked the equivalent of eight terms on this research, and that the conditions of the relevant ordinance and regulations have been fulfilled.

Signed…….... Date……..…….

Professor Christine Helliar

Signed…….... Date……..…….

Dr. Louise Crawford

Abstract

Internet Financial Reporting in Arab MENA countries: An Institutional Perspective

The advent of the internet has provided a new possibility for companies to communicate with their stakeholders and this thesis uses a new institutional sociology perspective to investigate the adoption of Internet Financial Reporting (IFR) in Arab MENA countries (Middle East and North Africa) to: i) evaluate the extent of IFR; and ii) identify the factors that influence Arab MENA listed companies to voluntarily adopt IFR.

The study examines the extent of IFR in Arab MENA countries in 2010 using a sample of 1,456 listed companies from the 16 Arab MENA countries that have a stock exchange. To determine the factors that affect listed companies to adopt IFR, 961 listed companies were investigated from ten Arab MENA countries from two regions. Seven factors are investigated; five of which (company size; profitability; leverage; type of auditor; and industrial sector) have been investigated in prior studies; the other two factors, country and region, are also investigated as the effect of a country has been investigated in very few studies; the regional factor has not been investigated at all in prior studies; and hence contributes to our knowledge.

The main findings of this thesis indicate that IFR in Arab MENA countries is growing; but listed companies in Gulf Cooperation Council (GCC) countries have the most extensive[1] practice of IFR; North African listed companies are next whereas listed companies located in the Middle East excluding GCC countries have a lower level of IFR than the other two groups. Moreover, the findings reveal that communities of practice have been formed by large profitable companies as well as those audited by the Big-4 audit firms. Further, financial sector companies and companies from the GCC region also appear to have similar practices with more extensive IFR than other listed companies.

These communities of practice may be due to coercive, mimetic and normative isomorphism. From a mimetic pressure, arguably, listed companies imitate each other, as for instance, managers of large profitable companies, or financial companies may network and meet together and discuss issues relating to their businesses. Companies within the same country may also be exhibit homogeneous IFR practice for the same reason. Furthermore, companies from one region may be similar to each other because they have similar country characteristics such as political and economic factors. From a normative isomorphic perspective, the Big-4 audit firms may influence companies to adopt IFR across the globe. Further, banks in many countries have separate requirements bringing a coercive influence to bear on their practices.

[1] Extensive practice of IFR refers to highest proportion of listed companies that have IFR.

Chapter 1: Introduction

Chapter 1

Introduction

1.1 Preface

Over the past two decades, companies' financial disclosure has changed as a result of technological advances in communication (Deller et al., 1999; Mohamed, 2010). The internet is now used as a means for communicating financial and none financial information to a variety of company stakeholders. In this context, Mohamed (2010) states that "the internet has the potential to revolutionise financial reporting" (p. 114). Thus, internet financial reporting (IFR) has become a mainstream and as Debreceny et al. (2002) mention:

> "IFR supports dynamic forms of presentation that are not available in the paper paradigm, such as direct user interaction with corporate databases and multimedia sound and video". (p. 372)

As a result of increased economic, regulatory and market pressures, companies may be forced to host a web site and upload information regarding financial performance, corporate governance, environmental and social issues, and other information (Mohamed, 2010).

1.2 Research Objectives and Questions

This thesis contributes to our knowledge by evaluating the extent of IFR in all Arab Middle East and North Africa (MENA) listed companies in 2010, and aims to identify the factors that may influence IFR adoption using an institutional perspective to interpret the variation in IFR adoption by listed companies in Arab MENA countries. Moreover, the current study investigates each country separately, and is one of only a few studies that investigate this influence. Further, since Arab MENA countries consist of two regions, the current study has the opportunity to

examine the effect of region on IFR- notably the six Gulf Cooperation countries versus North African countries.

This study is a cross-sectional multi-country study. As such, it applies to two regions, the Middle East and North Africa, and includes 16 Arab MENA countries that have a stock exchange in 2010 namely: Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi, Syria, Tunisia, and UAE; and uses 1,456 of the Arab MENA listed companies. The current study therefore provides a comprehensive up-to-date account of IFR practices in Arab MENA countries. IFR in Arab MENA countries is voluntary and still not regulated; hence, basing this study on one year may be defended because there will be no changes to a mandatory regime that could happen in a multi-period study, and further, the emphasis of the study is cross-sectional. The year 2010 was chosen because it was the most recent year at the time of this study.

In order to accomplish the objectives of this study, the two following research questions are addressed:

Research Question 1: To what extent do listed companies in Arab MENA countries engage in IFR?

This question has been divided into:

1. What is the percentage of the Arab MENA listed companies that have a web site?
2. What is the percentage of the Arab MENA listed companies that have a web site and post financial information via their web site?

Research Question 2: Which factors influence IFR adoption in Arab MENA listed companies?

This question examines institutional characteristics, comprising:

1. *Country.*
2. *Region.*
3. *Industrial sector.*
4. *Company size.*
5. *Profitability.*
6. *Leverage.*
7. *Auditor type.*

1.3 Scope of the Research

This study aims to understand and explore the practices of IFR in Arab MENA listed companies using an institutional sociology theoretical framework to determine if there is a community of practice; and to examine the effect of different types of institutional pressures such as coercive, mimetic, and normative isomorphisms on the adoption of IFR by Arab MENA listed companies. Institutional theory is significant in explaining impacts on organisational practices of companies in emerging markets such as Arab MENA countries (Hoskisson et al., 2000; Wright et al., 2005), this is because "government and societal influences are stronger in these emerging economies than in developed economies" (Hoskisson et al., 2000; p. 252).

This study consists of two empirical pieces of work. The first empirical investigates IFR amongst all listed companies in Arab MENA countries by examining if all Arab MENA listed companies in 2010 have a web site and if they have IFR. Quantitative data is collected from an examination of: the 1,456 listed companies in Arab MENA countries.

The second empirical piece of work examines the factors that may affect the adoption of IFR by Arab MENA listed companies. As a result of inaccessibility of data from some countries, the companies included in this part are selected from 10, not 16, Arab MENA countries namely:

Bahrain, Egypt, Kuwait, Libya, Morocco, Oman, Qatar, Saudi, Tunisia, and UAE. Binary logistic regression is applied in this part of the thesis using a sample of 961 listed companies from the two MENA regions.

The literature reveals that the majority of IFR studies have been conducted in countries with developed capital markets and little attention has been paid to IFR practices in developing countries, in general, and in the Arab MENA region in particular. Furthermore, in the Arab MENA region, all IFR studies undertaken to date have been conducted in a single country except: i) Ismail's (2002) study that investigated IFR practice in three of the Gulf Cooperation Council (GCC) countries namely: Bahrain, Qatar, Saudi Arabia; ii) Joshi and Al-Modhaki, (2003) in Bahrain and Kuwait; and iii) Mohamed's (2010) study which investigated IFR in two of the six GCC countries namely: Bahrain and Oman.

The dearth of studies in Arab MENA countries motivated the researcher to investigate IFR in all Arab MENA countries. Further, to the best of the researcher's knowledge, no previous studies, either in developed countries or developing countries have adopted an institutional theory perspective in interpreting the variations in IFR among companies; this thesis hence contributes to our knowledge.

This study will contribute to narrowing the gap in the literature about IFR practices in all Arab MENA countries and also contribute to our knowledge by determining whether there is a community of practices that influences Arab MENA listed companies to adopt IFR, and to explain how different institutional pressures affect these companies in adopting IFR.

1.4 Structure of the Thesis

The current thesis comprises eight chapters. Chapter 1 provides an introduction about the study including the research questions, focus, objectives, and thesis structure. This is followed by Chapter 2, which provides an overview of the 16 Arab MENA countries context, including geographical, political, and economical background; financial reporting environment; the stock exchange; and the internet in these countries. This helps in understanding the Arab MENA countries characteristics that are expected to have an influence on IFR.

Chapter 3 reviews the extant academic and professional literature on IFR in both developed and developing countries. This chapter is divided into two main parts; the first focuses on financial reporting disclosure, including the reasons for financial reporting; the objective of financial reporting; users of financial reporting; the qualitative characteristics of financial information; disclosure (mandatory and voluntary); the internet; and finally internet financial reporting. The second part of this chapter reviews and outlines the prior studies on IFR. It classifies these studies into two main groups: country and institutional factors. The country studies are divided into three groups: single-country studies; multi-country studies; and Arab MENA studies. Regarding multi-country studies, only a small number of studies have been conducted in this area; mostly in developed countries; very few studies are in developing countries in general or in the MENA region in particular. This study helps to fill this gap.

With regard to institutional factors, the current study reviews the prior literature that investigates company size, profitability, leverage, auditor type, industrial sector, country, and region. In addition, this part outlines the proxies that are used for each factor in prior studies.

Chapter 4 discusses the institutional framework employed as the theoretical underpinning of the current study. The chapter identifies theory in general and institutional theory in particular, including the three branches of institutional theory. This study adopts a new institutional sociology perspective and analyses Arab MENA listed companies as an organisational field. This study is a multi-country study with countries from two regions; companies may thus not be part of a single community, but rather, there may be several different communities, held together by actors with shared associations. This chapter explores the institutional pressures that may shape the IFR practices of Arab MENA listed companies.

Chapter 5 discusses the methodological assumptions underpinning the current thesis as well as the research methods that are used to achieve the research's objectives. The chapter reviews Burrell and Morgan's (1979) assumptions and outlines the four research paradigms. Based on the research objectives of this thesis, it is argued that this study is located in the functionalist paradigm of Burrell and Morgan's matrix.

Chapter 6 contains the first empirical work undertaken for this study. This chapter determines the extent of IFR practices among listed companies in the 16 Arab MENA countries in 2010. The chapter reports the IFR of the sixteen Arab MENA countries in detail (country by country). Statistical techniques are applied to investigate whether there are any differences between these countries. Finally, Chapter 6 provides a summary that includes a comparison by sector as well as a comparison between the regions.

Chapter 7 presents the second empirical piece of work. The chapter develops the hypotheses emanating from the second research question in the current study. The hypotheses are derived

from the theoretical framework to examine the relationship between IFR and the explanatory variables that may affect Arab MENA listed companies to adopt IFR. The chapter includes descriptive analysis of the dependent and independent variables used in the current thesis. The dependent variable is dichotomous based on whether a company has IFR. Finally, the chapter ends with a discussion of the findings in the light of the prior literature and based upon the theoretical framework adopted in the current study. Consequently, this chapter answers the second research question.

Finally, Chapter 8 of this thesis provides the main conclusions. It summarises the findings of the current thesis. The chapter outlines the contribution of the study as well as the limitations. Further, it presents avenues for further developments and future research.

Chapter 2: The Arab MENA Countries

Context

Chapter 2

The MENA Region Background: 16 Selected Arab MENA Countries

2.1 Introduction

The aim of this chapter is to provide an overview of selected Arab MENA countries. Section 2.2 identifies MENA countries; and sections from 2.3 to 2.18 discuss 16 selected Arab MENA countries outlining for each of these countries: the geographical, political and economic background; the financial reporting environment; the stock exchange; and the extent of internet facilities and access. This is followed by Section 2.19 which discusses MENA regions; and finally Section 2.20 summarises the chapter.

2.2 MENA Countries Definitions

As mentioned in Chapter 1, the term MENA refers to Middle East and North African countries; it typically includes the area from Morocco in North West Africa to Iran in South West Asia and down to Sudan in Africa. The World Bank describes the MENA region as:

> "… an economically diverse region that includes both the oil-rich economies in the Gulf and countries that are resource-scarce in relation to population, such as Egypt, Morocco, and Yemen. The region's economic fortunes over much of the past quarter century have been heavily influenced by two factors – the price of oil and the legacy of economic policies and structures that had emphasized a leading role for the state" (The World Bank, 2012a).

However, according to Roudi-Fahimi and Kent (2007), there is no a specific definition of MENA; they state that:

> "The term [MENA] was used by the British in the late 19th century to refer to the Persian Gulf region. By 1950, the Middle East included not only Iran, Israel, and the Arab states of Western Asia, but also Cyprus, Egypt, and Turkey. The boundaries are sometimes stretched eastward to take in Afghanistan and westward as far as Morocco" (Roudi-Fahimi and Kent, 2007; P: 4).

Based on the above mentioned definitions, there is no a generally agreed number of MENA countries; for instance, The World Bank includes 21 MENA countries in its classification namely: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, West Bank & Gaza, and Yemen. The UNICEF[2] classification is identical to The World Bank classification except that it does not include Malta and Israel but includes Sudan which is not included in The World Bank classification. According to the United Nations[3], the MENA is region classified into 20 countries, whereas the International Monetary Fund (IMF)[4] classifies MENA into 24 countries. Table 2.1 summaries MENA countries classifications by different organisations.

[2.] For more information, see the UNICEF web site at http://www.unicef.org/infobycountry/northafrica.html.
[3.] For more information, see the United Nation web site at http://www.ohchr.org/EN/countries/MENARegion/Pages/MenaRegionIndex.aspx.
[4.] For more information, see the IMF web site at www.imf.org.

Table 2.1: MENA Countries Classifications

No.	The World Bank	UNICEF	The United Nations	The IMF	Arab MENA Countries*
1				Afghanistan	
2	Algeria	Algeria	Algeria	Algeria	**Algeria**
3	Bahrain	Bahrain	Bahrain	Bahrain	***Bahrain*****
4	Djibouti	Djibouti		Djibouti	Djibouti
5	Egypt	Egypt	Egypt	Egypt	***Egypt***
6	Iran	Iran		Iran	
7	Iraq	Iraq	Iraq	Iraq	**Iraq**
8	Israel		Israel		
9	Jordan	Jordan	Jordan	Jordan	**Jordan**
10	Kuwait	Kuwait	Kuwait	Kuwait	***Kuwait*****
11	Lebanon	Lebanon	Lebanon	Lebanon	**Lebanon**
12	Libya	Libya	Libya	Libya	**Libya**
13	Malta				
14			Mauritania	Mauritania	Mauritania
15	Morocco	Morocco	Morocco	Morocco	**Morocco**
16	Oman	Oman	Oman	Oman	***Oman*****
17				Pakistan	
18	Palestine	Palestine	Palestine	Palestine	**Palestine**
19	Qatar	Qatar	Qatar	Qatar	***Qatar*****
20	Saudi	Saudi	Saudi	Saudi	***Saudi* ****
21				Somalia	Somalia
22		Sudan		Sudan	Sudan
23	Syria	Syria	Syria	Syria	**Syria**
24	Tunisia	Tunisia	Tunisia	Tunisia	**Tunisia**
25	UAE	UAE	UAE	UAE	***UAE*****
26			Western Sahara		Western Sahara
27	Yemen	Yemen	Yemen	Yemen	Yemen
Total	**21**	**20**	**20**	**24**	**22**

Note: this table shows MENA countries as classified by different organisations. *This column identifies Arab MENA countries where are bolded countries having a stock exchange. **These countries represent the Gulf Cooperation Council countries.

Table 2.1 shows that the number of MENA counties differs from one classification to another. Moreover, it shows that among the MENA countries, there are 22 Arab countries; therefore, the MENA countries can be classified into two categories namely: i) Arab MENA countries; and ii) non-Arab MENA countries. This study focuses on Arab MENA countries and investigates IFR by Arab MENA listed companies; and hence, only Arab MENA countries with a stock exchange will be included in this research. Among the Arab MENA countries, it was found that 16 have

stock exchanges namely: Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, and United Arab Emirates (UAE). Therefore, from this point onwards, only the above mentioned 16 Arab MENA countries, as shown in Table 2.1, that have stock exchanges will be discussed.

Sourial (2004) classifies the Arab MENA countries commonly into three different categories. The first category includes the early reformers such as Egypt, Jordan, Morocco, and Tunisia; countries in this category embarked on economic reform programs in the mid-1980s, and opened up their economies to foreign investments; in addition, they privatised state-owned enterprises, reduced budget deficit and inflation, and liberalised their trade. The second category includes the oil exporting countries such as Gulf Cooperation Council countries (GCC); these countries mainly depend on producing and exporting oil and gas. This category achieved macroeconomic stability because of the continuous increase in global oil prices, even during the Iraqi war. Unlike the second category, the third category includes countries that still have not achieved economic stability yet, either because they are not stable politically such as in West Bank and Gaza (Palestine) and Iraq, or they are still in the early stages of economic reforms such as Algeria, Lebanon, Libya, and Syria. It is worth mentioning that both Iraq and Libya also depend on producing and exporting oil.

Different countries can be classified by their economy; for instance, The World Bank (2012b) classifies economies by Gross National Income (GNI) per capita. Based on GNI per capita, The World Bank classifies the world's economies into three categories: i) low income, $1,025 or less; ii) middle income (subdivided into lower middle, $1,026 - $4,035; and upper middle, $4,036 - $12,475); and iii) high income, $12,476 or more. Table 2.2 displays the economic classifications for the Arab MENA countries by GNI per capita.

Table 2.2: GNI Per Capita for Arab MENA Countries that have Web Sites

No.	Country	GNI (US dollars)	Group classification
1	Algeria	4,470	Upper middle
2	***Bahrain***	15,910	***High***
3	Egypt	2,600	Lower middle
4	Iraq	2,640	Lower middle
5	Jordan	4,380	Upper middle
6	***Kuwait***	48,910	***High***
7	Lebanon	9,110	Upper middle
8	Libya	12,320	Upper middle
9	Morocco	2,970	Lower middle
10	***Oman***	19,260	***High***
11	Palestine	*	Lower middle
12	***Qatar***	80,440	***High***
13	***Saudi Arabia***	17,820	***High***
14	Syria	2,750	Lower middle
15	Tunisia	4,070	Upper middle
16	***UAE***	40,760	***High***

Source: Adopted from The World Bank.
Note: *= Estimated to be lower middle income.

Table 2.2 shows that all GCC countries' GNI are classified as high; whereas 5 countries (Algeria, Jordan, Lebanon, Libya, and Tunisia) are classified as upper middle GNI countries; and the other 5 countries (Egypt, Iraq, Morocco, Palestine, and Syria) are lower middle GNI countries. Moreover, the table shows that none of the 16 Arab MENA countries is classified as low.

In regard to the legal system of the sixteen Arab MENA countries, The World Factbook shows that the legal system in these countries is different as shown in Table 2.3.

Table 2.3: The Legal System of the 16 Arab MENA Countries

No.	Country	Legal System
1	Algeria	Mixed legal system of French civil law and Islamic law; judicial review of legislative acts in ad hoc Constitutional Council composed of various public officials including several Supreme Court justices.
2	Bahrain	Mixed legal system of Islamic law, English common law, Egyptian civil, criminal, and commercial codes; customary law.
3	Egypt	Mixed legal system based on Napoleonic civil law and Islamic religious law; judicial review by Supreme Court and Council of State (oversees validity of administrative decisions).
4	Iraq	Mixed legal system of civil and Islamic law.
5	Jordan	Mixed legal system of civil law and Islamic religious law; judicial review of legislative acts in a specially provided High Tribunal.
6	Kuwait	Mixed legal system consisting of English common law, French civil law, and Islamic religious law.
7	Lebanon	Mixed legal system of civil law based on the French civil code, Ottoman legal tradition, and religious laws covering personal status, marriage, divorce, and other family relations of the Jewish, Islamic, and Christian communities.
8	Libya	Libya's post-revolution legal system is in flux and driven by state and non-state entities.
9	Morocco	Mixed legal system of civil law based on French law and Islamic law; judicial review of legislative acts by Supreme Court.
10	Oman	Mixed legal system of Anglo-Saxon law and Islamic law.
11	Palestine	N/A
12	Qatar	Mixed legal system of civil law and Islamic law (in family and personal matters).
13	Saudi	Islamic (sharia) legal system with some elements of Egyptian, French, and customary law; note - several secular codes have been introduced; commercial disputes handled by special committees.
14	Syria	Mixed legal system of civil and Islamic law (for family courts).
15	Tunisia	Mixed legal system of civil law, based on the French civil code, and Islamic law; some judicial review of legislative acts in the Supreme Court in joint session.
16	UAE	Mixed legal system of Islamic law and civil law.

Note: This table displays the legal system of the 16 Arab MENA countries.
Source: Adopted from Central Intelligence Agency (CIA) (2013).

Table 2.3 shows the legal system of the 16 Arab MENA countries included in this study. It indicates that legal system among differs from one country to another among the 16 Arab MENA countries. This helps in understanding the effect of country on IFR adoption, which will be discussed in the next chapters.

According to Kamal (2009), the world's major religions were originated in the MENA region (particularly in Middle East). Judaism, Christianity, and Islam are the three religions in the MENA region; Judaism emerged first, then, from its bosom emerged Christianity, and finally, came Islam, as part of the same continuum, with its belief in both Judaism and Christianity as the same single divine message. Boer et al. (2008) mention that Islam was eventually forged a common cultural and religious bond throughout the region.

Many factors such as political and religious movements, as well as natural resources have shaped the modern region. In the last four centuries, most MENA countries were either part of the Ottoman Empire, British protectorates or members of the British Commonwealth (Boer et al., 2008).

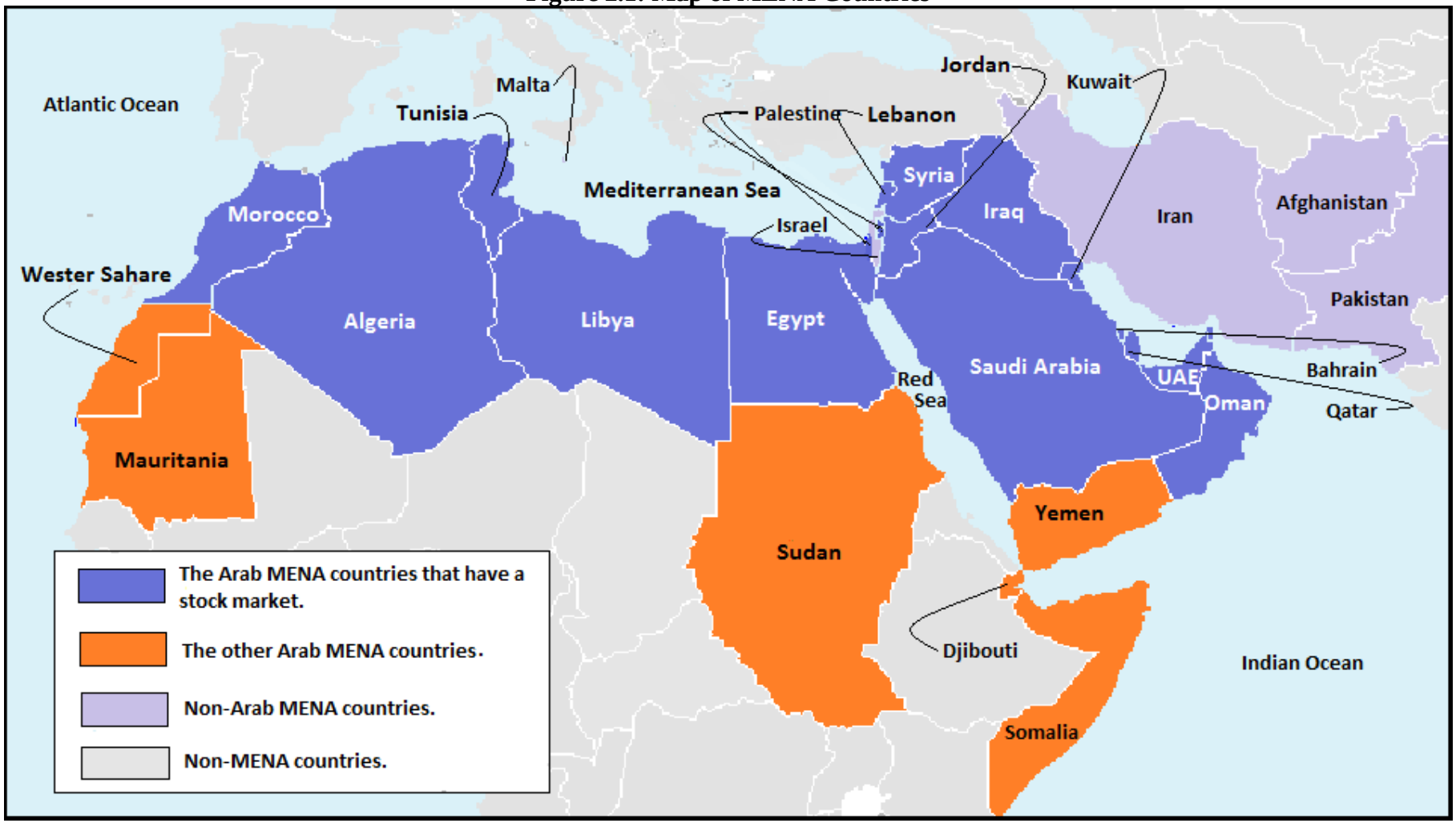
The MENA countries have been linked economically and politically for thousands of years, as they have been trading partners throughout history and have been governed by Persian and Caliphate Empires as well as the Ottoman Empire and the British (Boer et al., 2008). Based on this common history, shared customs, languages, traditions, and religions have been created and have stood the test of time, and become a means for expanded economic opportunity and growth (Boer et al., 2008).

The MENA countries have complementary and diversified resources; some countries have hydrocarbon wealth such as the GCC countries, as well as Algeria and Libya, and account for a major proportion of MENA's total oil and natural gas reserves (Boer et al., 2008). Recently, the MENA countries' economies have diversified away from their natural resources by utilising the concept of "economic free zones" in order to attract foreign capital and resources (Boer et al., 2008). The next section provides an overview of each of the 16 Arab MENA countries, in terms

of their political and geographical background, economic system, stock market, and financial reporting environment.

As mentioned above, the current study investigates the IFR of listed companies in 16 Arab MENA countries that have a stock market (see Figure 2.1). These countries present a variety of factors of the MENA region because some countries are from the Eastern region (Middle East) and the others are from the Western region (North Africa). Furthermore, some MENA countries are oil economies, whereas the others are non-oil or low-oil economies. In addition, the income per capita differs from one MENA country to another. The next sections provide an overview of the 16 selected Arab MENA countries in alphabetical order.

Figure 2.1: Map of MENA Countries



Source: developed for this study.

2.3 Algeria

2.3.1 Geographical and Political Background

The People's Democratic Republic of Algeria is Africa's second largest country, located in North Africa, with a total area of almost 2.4 million square kilometres. The country is bordered by the Mediterranean Sea to the North, Libya and Tunisia to the East, Morocco and Western Sahara to the West, Niger to the South Eastern, and Mali and Mauritania to the South West. According to the CIA (2012a), the population of Algeria is estimated to be 34.6 million in 2010. After Algiers, which is the capital, the most populous cities are Oran, Constantine, and Annaba. In addition to Arabic, which is the official language, Berber and French are also used. Most of the country's religion is Muslim (99%); the other 1% is Christian and Jewish. Algeria was originally inhabited by Berbers until the Arabs conquered North Africa in the 7th century. Nine centuries later, the region was placed under the protection of the Ottoman Empire. In 1830, the country became a French colonisation, which lasted for more than a century, and condemned Algeria's population to economic, social and political inferiority and caused armed resistance in 1950s (CIA, 2012a). In 1962, Algeria gained independence from France after more than a million Algerians were killed in the fight for independence from France. In 1954, the Algerian primary political party was established as a part of the struggle for independence and has largely dominated politics since. In 1988, the Algerian government instituted a multi-party system in response to public unrest. In 1999, Abdelaziz Bouteflika won the presidency in an election widely viewed as fraudulent; and was re-elected to a second term in 2004 and overwhelmingly won a third term in 2009[5] (CIA, 2012a). A review of the Algerian economy is provided in the next section.

[5.] The government amended the constitution in 2008 to remove presidential term limits.

2.3.2 Algeria: Economic Background

Oil and natural gas are the main two resources on which Algeria is highly dependent; they account for more than 95% of all export earnings[6]. The country's economy is dominated by the state, a legacy of the country's socialist post-independence development model. However, the government has halted the privatisation of state-owned industries and imposed restrictions on imports and foreign involvement in its economy (CIA, 2012a). Furthermore, the government seeks to diversify the economy by attracting both foreign and domestic investment away from the energy sector (CIA, 2012a). According to The World Bank (2012a), the GDP and inflation of Algeria in 2011 were $188.7 billion and 4.5%.

2.3.3 Algeria: Financial Reporting Environment

According to the International Monetary Fund (2004), Algerian accounting principles are not clear and financial statements are generally unreliable for information on company performance. Moreover, companies in Algeria are not required to prepare financial statements and there are no accounting guidelines for the treatment of a number of important transactions. In addition, compliance with local standards is not enforced effectively and there is no framework for sanctions and penalties. However, according to PricewaterhouseCoopers (2012), all listed companies in Algeria are required to prepare their financial statements in accordance with the International Financial Reporting Standards (IFRS) from 2010.

2.3.4 The Algerian Stock Exchange

The stock exchange in Algeria, which is known as Bourse d'Alger, is the only stock exchange in Algeria. It was established in 1997 and officially created in 1999; it is located in the capital

[6.] Algeria has the tenth-largest reserves of natural gas in the world and is the sixth-largest gas exporter.

city of Algiers (Algeria's Stock Market, 2012). The exchange is run by the Societe de Gestion de la Bourse des Valeurs (SGBV) and supervised by the Stock Exchange and Surveilaance Commission. The number of listed companies in 2010 was only six companies. According to Oxford Business Group (2010), the market capitalisation of Bourse d'Alger in 2010 was $91.04 million.

2.3.5 The Internet in Algeria

Over the past decade, the number of Algerian internet users has increased more than 90- fold; from 50,000 in Dec/2000 to approximately 4.7 million in 2010 representing 14% of the population (Internet World Stats, 2010a). Still, the user-rate of the population is low compared to Egypt (21.20%), Morocco (33.02%), and Tunisia (34.00%) (Internet World Stats, 2010a). Based on the above, it seems that the internet is not widely used in the country; and listed companies have only recently begun to comply with IFRS; moreover, only a few companies (six companies) are listed on the stock exchange. Therefore, it is very likely that the extent of IFR in Algeria is going to be low. Bahrain, one of the Middle East countries, is in the next section.

2.4 Bahrain

2.4.1 Geographical and Political Background

The Kingdom of Bahrain is a group of islands with a total area of 670 square kilometres; the largest island in the group is Bahrain Island, situated in the heart of the Arabian Gulf and linked to Saudi Arabia by a causeway (Terterov, 2005). Manama is the capital and the largest city of Bahrain; it is an important trading centre in the Persian Gulf. The total population of Bahrain is 1.2 million, including 0.67 million non-Bahraini (Central Informatics Organisation, 2010); it is noticeable that non-Bahrainis represent more than half (54%) of the total population census in

2010. Arabic is the official language of the country, but English is widely spoken especially in business and it is a compulsory second language in schools. Farsi and Urdu are another two languages which are used by non-Bahraini people. Islam is practiced by the majority of Bahrainis and governs their personal, political, economic and legal lives.

The history of the Kingdom can be followed back to the Dilmun civilisation nearly 6,000 years ago (Oxford Business Group, 2011). Because of its strategic location, Bahrain over the years has been influenced by various powers including Persians, Sumerians, Assyrians, Babylonians, Arabs, Portuguese and the British (Oxford Business Group, 2011). In the 7th century, Bahrain's islands converted to Islam and were ruled by a series of Islamic rulers until the early 16th century when it was conquered by the Portuguese. In 1602, the islands became part of Persia and since 1783 the country has been headed by the Al-Khalifa family who expelled the Persians. From 1861 until independence in 1971, Bahrain was a British protectorate. In 1972, a constitution was introduced; it provided for an elected National Assembly. This was dissolved after two years and has not been reinstated. In 1992, an appointed Consultative Council was set up and this was enlarged in 1996. Since 1999, King Hamad bin Isa bin Salman Al-Khalifa has ruled the country. He is the supreme authority in the country; in addition, the main political and military posts are held by members of the Sunni Muslim ruling family. In 2002, the Consultative Council was transformed into a constitutional monarch with a democratically elected parliament; and Sheikh Hamad declared himself King and Bahrain is thus a constitutional monarchy (Oxford Business Group, 2011).

2.4.2 Bahrain: Economic Background

Compared to its neighbours (Kuwait and Saudi Arabia), Bahrain has been endowed with smaller oil resources; thus, it has turned to petroleum processing and refining and also has transformed itself into an international banking centre. As a result, Bahrain's economy can be described as one of the most advanced and diversified in the region. The unemployment rate has reduced from roughly 14% six years ago to the 3.6-4% range today; this change is due to Bahrain's Ministry of Labour that has long been charged with helping locals find employment (Oxford Business Group, 2011). According to the Economic Development Board's (2010) annual economic review, real Gross Domestic Product (GDP) increased 70% between 2000 and 2009, at an average annual rate of 6%. This increase is due to growth in the financial sector, where output nearly doubled (Economic Development Board, 2010).

2.4.3 Bahrain: Financial Reporting Environment

According to Commercial Companies Law 2001 (the earlier Law of 1975 being substantially amended), all companies[7] are required to prepare their financial statements in accordance with International Financial Reporting Standards (IFRS). Generally, the criterion of financial reporting in the Kingdom of Bahrain is high and largely consistent (Tait, 2005).

2.4.4 The Bahraini Stock Exchange

The official name of the Bahraini stock exchange is Bahrain Bourse (BHB); it was established as a shareholding company according to Law No. 60 for the year 2010 to replace the Bahrain Stock Exchange that was established in 1987. The BHB was established under the legislative

[7.] This includes listed companies on the Bahrain Stock Exchange, all banks, financial institutions licensed by the Bahrain Monetary Agency, and the central bank of Bahrain.

and regulatory authority and supervision of the Ministry of Commerce; however, the regulation and supervision of all the Bourse's activities was transferred to the Central Bank of Bahrain in 2002. The number of listed companies in 2010 was 43 companies; and the market capitalisation of the market in 2007 was $28.13 billion; this value was affected by the world crisis in 2008 and decreased to $21.18 billion and continued fall to reach $20.429 billion in 2010. Internet usage in Bahrain is in the next section

2.4.5 The Internet in Bahrain

The Kingdom is one of the regional leaders in term of internet penetration rates. Bahrain has received international recognition for its efforts; according to the United Nations Public Administration Network (2012), Bahrain was ranked first in the Gulf and Middle East and 13th worldwide. The number of internet users in Bahrain in 2010 was 1,056,000 representing 88% of the population; this compares to just 40,000 users of the internet in 2000 (Internet World Stats, 2010b). Overall, it seems that the internet is widely used in the country; and listed companies comply with IFRS; and thus, it is very likely that extent of IFR in Bahrain is going to be high. A North Africa country, Egypt, is discussed in the next section.

2.5 Egypt

2.5.1 Geographical and Political Background

The Arab Republic of Egypt is located in the North East of Africa and South West of Asia with a total area of about one million square kilometres. It is bounded to the North East by Palestine and Israel, from the West by Libya, from the South by Sudan, from the North by the Mediterranean Sea, and from the East by the Red Sea. One of the most noticeable features in Egypt is the River Nile, which is the longest river in the world (6,727 km). According to CIA

(2012b), the estimated population of Egypt in July 2012 was 83.7 million; about half of Egypt's residents live in urban areas, with most concentration on the banks of the River Nile, spread across the densely populated centres of greater Cairo, which is the capital, and Alexandria, which is the second city in Egypt. Arabic is the official language in Egypt; in addition, many Egyptians also speak and understand English as well as French (Hanafi, 2006). Islam and Christianity are the two religions in Egypt with Muslims forming 90% of the population and most of the remaining 10% being Coptic Christians.

Egypt has one of the oldest political systems in the world which date back 7,000 years when Egyptians started settling along the banks of the River Nile (Hanafi, 2006). Egypt over the years has been occupied by various powers including Persian, Greek, Roman, Turkish, Arab, Mamluk, Ottoman, French, and the British, who ruled Egypt for almost 70 years (Hanafi, 2006). In 1922, Egypt became an independent country and was ruled by King Faruk. In 1952, a group of army officers, known as The Free Officers, led by Colonel Gamal Abdel Nasser, forced King Faruk to leave the country and Mohamed Naguip became the first President of Egypt after the independence. Two years later, President Naguip resigned and Gamal Abdel Nasser became the President of Egypt until he died in 1970. Since that time, the country was then ruled by Anwar Sadat until 1980; and then by the President Hosni Mubarak until he resigned because of the Egyptian revolution in 2011. After the resignation of Mubarak, the Supreme Council of the Armed Forces handled the power of the country for a year and half; then, on June 24, the Higher Presidential Election Commission declared Mohamed Mursi as the President of Egypt (Ahmed, 2013). The Egyptian economic development is the next section.

2.5.2 Egypt: Economic Background

Before the 1952 revolution, Egypt was primarily an agrarian economy with 70% of the population employed in the Agriculture Sector (Farag, 2009). Raw cotton was the main export crop; in addition, Egypt was dependent on the manufactured goods imported from Britain (Hassan, 2006). The Egyptian economy was characterised by private ownership with a limited public sector. After the revolution, the government nationalised most Egyptian and foreign investments; as a result, the public sector expanded to be the largest part of the Egyptian economy (Hanafi, 2006). Living standards improved during this period; however, the economy was affected by two wars, in 1956 and 1967, and cost the country heavily with growth rates in GDP (3.1%) and GDP per capita (1%) (Abu-Bader and Abu-Qarn, 2008). For the period from 1975 to 1985, the country witnessed unprecedented growth as a result of the adoption of the Open Door Policy. On the other hand, this policy "was abused and distorted to a consumer importing policy due to the absence of core investment priorities" (Hassan, 2006; p. 90). From 1991 to 2010, many adjustments were made by adopting the Economic Reform and Structural Adjustment Programme. Accounting in Egypt is discussed in next section.

2.5.3 Egypt: Financial Reporting Environment

As mentioned above, Britain occupied and ruled Egypt for almost 70 years (since 1882); thus, the accounting profession and financial disclosure practices originally follow the UK (Abdelsalam, 1999). The post 1952 expansion in the public sector led to the government establishing the Central Auditing Organisation (CAO) to audit public companies and led to the Big-8 accounting firms (Big-4 today) leaving the country in 1965 (Abdelsalam, 1999). All public companies were required to prepare their financial statements in accordance with the Uniform Accounting System (UAS), which was established in 1966 for national planning and control

purposes (Hassan, 2006). However, during the Sadat era, and because of the Open Door Policy adoption in 1974, many accountancy firms were established and the Big-8 firms began to return back to Egypt (Abdelsalam, 1999).

The Egyptian Society for Accountants and Auditors plays a key role in drafting accounting and auditing standards. International accounting and auditing standards, which are suitable for use in Egypt, are selected and then translated into the Arabic language in order to be issued as Egyptian standards by the Permanent Committee for Standards of Accounting and Auditing[8]. Consequently, the first Egyptian Accounting and Auditing Standards were issued in 1997; from 1997 to 2002, 22 accounting standards and six auditing standards were issued and are comparable with corresponding IAS with a few exceptions (Wahdan et al., 2005). In order to enhance the quality of financial reporting and disclosure, new Egyptian accounting standards were introduced in 2006. These new standards accord with International Financial Reporting Standards (IFRS). A snap shot of the Egyptian Stock Exchange is reported in the next section.

2.5.4 The Egyptian Stock Exchange

The Egyptian Stock Market was named the Cairo and Alexandria Stock Exchange (CASE) until 2008; then it was replaced by the Egyptian Exchange (EGX). It is one of the oldest stock exchanges established in the Middle East region. It dates back to 1883 when the Alexandria Stock Exchange was established, then it was followed by the Cairo Stock Exchange in 1903 (EGX, 2012). According to Hassan (2006), the Egyptian Exchange was the second largest stock market in the MENA region, after Saudi Arabia. The number of listed companies in 2010 was 218 companies; and the market capitalisation at the end of 2007 was $139.2 billion but decreased

[8] The Permanent Committee for Standards of Accounting and Auditing was established in 1997.

in 2008 due to the world crisis to $85.9 billion and reached $82.5 in 2010; whereas the market capitalisation in 2011 was $48.7 billion due to the instability during the revolution of January 2011. Internet usage in Egypt is in the next section.

2.5.5 The Internet in Egypt

The early appearance of the internet in Egypt was in universities and the Cabinet's Information and Decision Support Centre (Mehanna, 2010). According to the Internet World Stats (2010a), the number of internet users was estimated to be 450,000 in 2000. However, the use of the internet in Egypt has increased and reached 17.06 million users in 2010, which presents 21.20% of the Egyptian population (Internet World Stats, 2010a). Based on the above, it seems that the internet, to some extent, is used in the country and all listed companies are required to follow the local standards which have been translated from IFRS; thus, it is very likely that the extent of IFR in Egypt is going to be medium. Iraq, one of the Middle East countries, is discussed in the next section.

2.6 Iraq

2.6.1 Geographical and Political Background

The Republic of Iraq is one of the Middle Eastern countries; it is bounded on the North by Turkey, on the South by Saudi Arabia and Kuwait, on the West by Syria and Jordan, and on the East by Iran (see Figure 2.1) with a total area of 438,317 square kilometres. It is a triangle of mountains, desert, and fertile river valleys. According to the CIA (2012c), the estimated population of Iraq in July 2012 was 31,129,225. More than one language is officially used in Iraq such as Arabic and Kurdish in addition to Turkmen and Assyrian which are official in the areas where they constitute a majority of the population. Islam is the official religion in Iraq with

97% of the population Muslim and the other 3% is Christian. The history of Iraq dates back to 4000 BC when the region was known as Mesopotamia (the land between the rivers) for it embraces a large part of the alluvial plains of the Tigris and Euphrates rivers. Since that time, the region has witnessed several civilisations[9] and administrations such as the Sumerians, Old and Neo-Babylonian Empire, Persians, Greeks, Arabs, the Mongols, Turkmen tribes, the Ottoman Empire, and, finally, it was under the British control from 1918 until it gained its independence in 1932[10].

The politics of Iraq takes place within a framework of a federal parliamentary representative democratic republic. It is a multi-party system whereby the executive power is exercised by the Prime Minister of the Council of Ministers as the head of government, as well as the President, and legislative power is vested in the Council of Representatives and the Federation Council (Political Resources, 2012).

2.6.2 Iraq: Economic Background

The Iraqi economy is characterised by heavy dependence on oil exports and an emphasis on development through central planning (Global Edge, 2012a). The Iran-Iraq war in 1980, and the Iraq war in 2003 depleted Iraq's foreign exchange reserves, destroyed its economy, and left the country saddled with foreign debt of more $40 billion; the Iraqi economy is dominated by the oil sector, which currently provides about 90% of foreign exchange earnings (Global Edge, 2012a).

9. These civilisations are the oldest on this planet.
10. For more information, see Iraq4ever website on http://www.angelfire.com/nt/Gilgamesh/history.html.

2.6.3 Iraq: Financial Reporting Environment

The Iraq Interim Law on Securities Markets (adopted 18 April 2004) requires IFRS for all companies listed on the Iraq Stock Exchange (Deloitte, 2008). According to Deloitte (2010), all domestic listed companies are required to prepare their financial statements in accordance with IFRS. Moreover, the Iraq Banking Law (administered by the Central Bank of Iraq) requires all banks to publish their financial statements in accordance with IFRS (Deloitte, 2008).

2.6.4 The Iraqi Stock Exchange

The Iraq Stock Exchange (ISX)[11], which is the sole exchange in the country, was established and started operation in June 2004 under the oversight of the Iraq Securities Commission (ISC). Now the ISX is financially and administratively independent from the Iraqi government including the Ministry of Finance. It is organised as a non-profit entity that is owned by its members, the brokers; with 85 companies listed in 2010 (Iraq Stock Exchange, 2012). According to Silk Road Management (2012), the market capitalisation of Iraq Stock Exchange in 2010 was $2.8 billion.

2.6.5 The Internet in Iraq

Iraq trails behind most of the rest of the Arab world when it comes to internet usage. This is because Iraq was at war (Iraq-Iran War and Iraq War) for much of the period when the internet was becoming widely used in other countries. As a result, it has taken Iraq time to catch up with other countries. The use of the internet in Iraq, however, has been growing very rapidly in recent years and people are finally gaining access to it (Arab IP Centre, 2012a). According to Internet

[11.] The Iraq Stock Exchange was known formally before 2003 as the Baghdad Stock Exchange and was initially established in 1992 and operated by the Iraqi Ministry of Finance.

World Stats (2010b), the number of internet users in Iraq in 2000 was 12,500; this number increased to 325,000 users in 2010 representing 1.10% of the population. According to the small number of internet users, and based on the relatively newly established stock exchange, it seems that the extent of IFR in Iraq will be low.

2.7 Jordan

2.7.1 Geographical and Political Background

Jordan, which is officially known as the Hashemite Kingdom of Jordan, is located in the Middle East region with a total area about 89,342 square kilometers (CIA, 2012d). It is bordered by Saudi Arabia and Iraq to the East, from the West by Palestine and Israel, from the North by Syria, and from the South by the Gulf of Aqaba, which is the only coastline in Jordan (see Figure 2.1). The population of Jordan is estimated in July 2012 to be 6.5 million (CIA, 2012d). Amman is the capital of Jordan and includes the highest percentage (38%) of the population, then Irbid with 17.8% of total population of Jordan (Department of Statistics-Jordan, 2012). Arabic is the official language in Jordan; in addition, English is widely understood among the upper and middle classes (CIA, 2012d). The majority (92%) of the population is Muslim whereas 6% are Christians; and the other 2% is mixed between Shia Muslim and Druze religions.

In 1921, the empire of Jordan was established under the rule of the Emir Abdullah following the Congress of Versailles after World War 1 (WWI). During WW1, Jordan was governed by the Turks as a part of the Othman Empire. At the end of WW1, Jordan came under the protectorate of the United Kingdom for 26 years until its independence in 1946 when Emir Abdullah was declared the King of Jordan. In 1952, King Talal was declared mentally unfit to rule, and his young son Hussein was proclaimed as his successor. The years after 1952 witnessed the beginning of democracy within Jordan and also witnessed one of the few peaceful eras within

the history of the country. This peace was shattered in 1967 with the start of the second Arab – Israeli war (Brynen, 1992; Piro, 1998; Beard and Al-Rai, 1999; Al-Kheder at al., 2009) until 1999 when Jordan signed a peace treaty with Israel. Jordanian economic overview is discussed in next section.

2.7.2 Jordan: Economic Background

Jordan's economy is among the smallest in the Middle East, with insufficient supplies of water, oil, and other natural resources. This scarcity of natural resources has forced Jordan to rely on three main sources of foreign financing: external aid largely from oil-rich states; remittances from Jordanian nationals working abroad; and exports (Marashdeh, 1996). Along with these sources of revenue, Jordan has relied on the exploitation of a limited amount of natural resources (potash, phosphates), tourism and foreign investment (ASE, 2011). During the Gulf War in 1990, the Jordanian economy was significantly and negatively affected; consequently, the debt level ($9 billion) was high compared to its annual budget and income of the country. As a result, the government adopted economic programmes to repay some of this debt as well as to improve the performance of the economy. In order to attract foreign investments, the government introduced new plans such as establishing Duty Free Zones, Free Trade Agreements with other countries, and Qualifying Industrial Zones; however, these plans were affected by the Iraq war in 2003. According to Al Nagi and Hamdan (2009), tourism and information technology are considered as the two main growth sectors in the country. Jordan was affected by the international financial crisis in 2008 when the growth in annual GDP fell by roughly 1% but accelerated to roughly 4% in 2009. In recent years, inflation has fallen to -0.7 although the exchange rate against the US Dollar has remained fixed at 0.70 Jordanian Dinars. The financial reporting environment will be discussed in next section.

2.7.3 Jordan: Financial Reporting Environment

In the 1960s, the Ministry of Industry and Trade (MIT) issued 2 laws: Company Law No. 12[12] in 1964 and Trade Law No. 12[13] in 1966 (Al-Akra et al., 2009; Al-Akra et al., 2010a; Al-Akra et al., 2010b). Thereafter, in the 1970s, the MIT issued a number of additional laws to support the development of the Jordan economy. Until the late 1980s, there was no official accounting body or organisation to provide guidance for the preparation of financial statements or reports (Mardini, 2012). Accordingly, the reporting methods that were employed by Jordanian companies had many weaknesses; and accounting standards had not been adopted at that time (Abdullatif and Al-Khadash, 2010). In 1987, a local professional accounting body, the Jordanian Association of Certifies Public Accountants (JACPA), was established; this body facilitated the adoption of International Accounting Standards (IASs) by recommending all Jordanian companies adopt the international standards voluntarily effective from January 1990 (Obaidat, 2007). In addition, the Companies Act in 1989 required all registered shareholding companies to prepare and publish their financial statements with explanatory notes within a maximum period of three months after the end of their previous financial year. Moreover, the Act required those companies to prepare their financial statements in accordance with General Accounting Accepted Principles (GAAP)[14]. In 1997, the Securities law and Company law were issued and required all Jordanian listed companies to apply IASs/IFRS in the preparation of their financial statements. A snap shot of the Jordanian Stock Exchange is the next section.

12. This law was very bounded in scope and was not strongly enforced.
13. This law required all companies to keep records of their financial activities.
14. The act did not mention to specific GAAP that should be followed.

2.7.4 The Jordanian Stock Exchange

The history of the Jordanian Stock Exchange dates back to 1930 when public shareholding companies were set up and their shares were traded, long before the setting up of the Jordanian Securities Market. As a result, the securities market was not organised and led the government to set up a market to regulate the issuance of and dealing in securities in a safe way. However, the Temporary Law No. 31 of the year 1976 was issued to establish what was known as the Amman Financial Market (AFM). In 1977, the AFM Administration Committee was set up and operations on AFM started on the 1st of January, 1978. The AFM played the role of a Securities and Exchange Commission (SEC) and the role of a traditional Stock Exchange until 1997 when the Temporary Securities Law No. 23 was issued; this law provided for setting up three new institutions to replace AFM, namely: i) Jordan Securities Commission (JSC); ii) Amman Stock Exchange (ASE); and iii) Securities Depository Centre (SDC). The ASE was established in March, 1999 as a private sector, non-profit institution with legal and financial independence. It includes two types of markets, namely: i) the First Market; and ii) the Second Market; companies can be listed on the Second Market as soon as they obtain the right to start their operations from the Ministry of Industry and Trade whereas there are more requirements for companies to be listed on the First Market. The Amman Stock Exchange[15], compared to other markets in the region that permit foreign investment, is a large stock market with a capitalisation of more than $40 billion in 2007; this value decreased in 2008 following the world crisis to $35.8 billion and continued to fall to reach $30.86 billion in 2010. Moreover, the number of listed companies reached 275 companies in 2010 but declined to 245 companies by September 2012 (Amman Stock Exchange, 2012). The internet in Jordan is discussed in next section.

15. For more information, visit the homepage of ASE at http://www.ase.com.jo.

2.7.5 The Internet in Jordan

According to Internet World Stats (2010b), the number of internet users in Jordan in 2000 was 127,300 representing 2.4% of the population; this number increased in 2010 to reach 1.74 million users representing 27.19% of the population. Like most of the Arab world, Jordan has been slow to adopt the internet in part because it is difficult to use Arabic characters online and in part because of the cost. However, the government of Jordan encourages the use of the internet by making an active effort; it has set a goal of making sure that all schools have internet access and as a result, a whole generation is growing up using the internet and they will be very likely to continue to do so in the future (Arab IP Centre, 2012c). Based on the above, it seems that the extent of IFR in Jordan is going to be medium. Another Middle East country and one of the GCC countries, Kuwait, is discussed in next section.

2.8 Kuwait

2.8.1 Geographical and Political Background

The State of Kuwait is a small country with a total area of 17,818 square kilometres; most of the land is flat sandy desert, with no rivers, mountains or natural features other than a few low hills and a number of islands. The country is situated in the North East of the Arabian Peninsula in Western Asia. It lies on the North Western shore of the Persian Gulf and is bordered by Saudi Arabia to the South and West, and Iraq to the North and West (see Figure 2.1). This location made Kuwait an important nation as the gateway to the Arabian Peninsula (Al-Yaqout, 2006). According to Almujamed (2011), Kuwait is widely considered to be a multi-cultural country due to the variety of nationalities that reside in it. The population of Kuwait in June 2011 was approximately 3.6 million and includes more than 65% (2.46 million) non-nationals. Arabic is the official language in the country and English is widely used, especially in education and

business. Islam is the religion of the majority (85%) of Kuwaiti citizens whereas the other 15% includes Christian, Hindu, and Parsi (CIA, 2012e).

The history of Kuwait dates back to the 18th century with the arrival of settlers form Saudi Arabia. In 1756, the inhabitants elected the Al-Sabah family and the first Emir was appointed. Since that time, the Al-Sabah family have continued to rule the country until the present day (Al-Yaqout, 2006). In 1899, Kuwait signed a protection treaty[16] with the UK. In 1962, Kuwait drafted a new constitution (Al-Yaqout, 2006). The current legal system in Kuwait is mixed; it consists of English common law, French civil law, and Islamic religious law. The next section discusses the economic development in Kuwait.

2.8.2 Kuwait: Economic Background

Kuwait was a major regional trading centre in the 18th century; it became increasingly important due to political instability during the 18th and 19th centuries in the region because of the war between the Persian and Ottoman Empires. Prior to discovering oil, the economy in Kuwait was mainly based on fishing and the export of pearls (Al-Sabah, 1980). Dramatic change occurred by the discovery of oil in 1938. Eight years later, the first oil shipment was exported and oil has become the dominant economic resource. In 1958, the government gave concessions to foreign companies planning to extract oil (Al-Omar, 1990). Two years later, a joint venture between the government and private sector was made by establishing the Kuwaiti National Petroleum Company (KNPC). The period from 1950 to 1960 witnessed a rapid growth of the Kuwaiti economy; this growth increased in the 1970s as a result of oil production that increased as well as high global oil prices at that time. The Kuwaiti economy was negatively affected by the first

16. Protection treaty is agreement continued for 62 years until Kuwait obtained independence in 1961.

Gulf war (1991) where GDP decreased from $28.63 billion in 1980 to $18.42 billion in 1990. The growth of the Kuwaiti economy has continued since then even during the second Gulf war as a result of further increases in oil prices (Almujamed, 2011). Financial reporting and the Kuwaiti environment is the next section.

2.8.3 Kuwait: Financial Reporting Environment

The Ministry of Commerce and Industry and the Kuwaiti Stock Exchange (KSE) are both the major regulatory bodies in Kuwait. The Company Law No. 15, which was issued in 1960, is one of the most significant laws of legislation regarding accounting in Kuwait. Based on this law, companies are required to keep records of their financial operations, prepare financial statements, and issue these financial statements within three months of the end of the financial year. In addition, these financial statements must be audited by at least two registered auditors; and to be available to both the Ministry of Commerce and Industry and to a company's shareholders (Al-Shammari, 2008). On the other hand, the law does not mention specific accounting standards that must be followed by a company when preparing its financial statements (Al-Shammari, 2008). Moreover, the law shows that the auditor should not accept any audit work that conflicts with audit engagements (Al-Bannay, 2002). Another source of financial reporting regulation in the country is the Kuwaiti Stock Exchange; for instance, the law 14/8/1983 and its amendments requires a company that seeks to be listed on the stock market to meet a number of requirements which are related to disclosure (Naser and Nuseibeh, 2003). Listed companies are also required by this law to provide their audited annual financial statements within three months of the end of their financial year. In April 1990, all companies, which operated in Kuwait, were requested by the Ministry of Commerce and Industry to comply with International Financial Reporting Standards (IAS/IFRS) from January 1991 (Naser and

Nuseibeh, 2003; Al Mutawaa and Hewaidy, 2010). A review on the Kuwaiti Stock Exchange is discussed in next section.

2.8.4 The Kuwaiti Stock Exchange

The history of shareholding companies dates back to 1950s prior to the establishment of the KSE, which was established in October 1962. The KSE provides a variety of exclusive stocks with a number of market instruments that make the KSE an attractive market for both domestic and foreign investors. The first formal stock exchange was opened in 1977. Ten years later, trading on KSE was opened to GCC citizens whereas foreign investors were only allowed to own the shares of listed domestic companies from 2000. In 2010, there were 218 listed companies distributed by various sectors. In order to urge companies to disclose more to shareholders who own 5% or more of the company shares, the 1999 KSE Committee passed resolution No. 5 concerning financial disclosure (Kuwait Stock Exchange, 2012). The market capitalisation of the market in 2007 was $188 billion; however, this value was affected by the world crisis and decreased to $107 billion in 2008 but increased to $119.6 billion in 2010.

2.8.5 The Internet in Kuwait

The Kuwaiti people's nature is characterised by consumerism; they always look for anything new; thus, the internet was the ideal way to help Kuwaitis fulfill this urge (Al-Shamari, 2011). According to the Internet World Stats (2010b), users of internet in Kuwait in 2000 were only 150,000; this number has increased to reach 1.1 million in December 2010 representing 39.44% of the population. By looking to the number of listed companies, the size of the market, and the financial reporting environment in Kuwait, it is very likely that IFR in Kuwait will be well

established compared to some other countries in the region. A Middle East country, Lebanon, is discussed in the next section.

2.9 Lebanon

2.9.1 Geographical and Political Background

The Lebanese Republic, lies at the Eastern end of the Mediterranean Sea, North of Israel and West of Syria (see Figure 2.1). The Lebanese Mountains cover most of the country. It is a small country with a total area of 10,400 square kilometres. According to the CIA (2012f), the estimated population of Lebanon in July 2012 was 4.14 million. Arabic is the official language in the country in addition to French, English, and Armenian which are widely used. Religion in Lebanon is mixed between Islam (61%) and Christian (39%). Lebanon is the historic home of the Phoenicians, Semitic traders whose maritime culture flourished there for more than 2,000 years. In later centuries, Lebanon's mountains were a refuge for Christians, and the Crusaders established several strongholds there. Following the collapse of the Ottoman Empire after WWI, the League of Nations mandated the five provinces that comprise present-day Lebanon to France. The country gained independence in 1943, and French troops withdrew in 1946[17].

2.9.2 Lebanon: Economic Background

The economy of Lebanon is service-oriented with Banking and Tourism being the two sectors that have the main growth in the country. Foreign exchange, foreign investment, and capital movement are not restricted although bank secrecy is strictly enforced. However, there are some

[17.] For more information, see Global Edge (2012) at http://globaledge.msu.edu/Countries/Lebanon/history.

obstacles[18] that would hinder investment in Lebanon (CIA, 2012f). According to the World Bank (2012c), GDP in 2011 was $42.2 billion; inflation in 2010 was 4% (the World Bank, 2012d).

2.9.3 Lebanon: Financial Reporting Environment

The Code of Commerce and its amendments deal with joint stock companies' regulation and set out the rules of companies; for instance, Law No. 27 (1980) requires all commercial companies, except banks, to follow a unified chart of accounts (The World Bank, 2003; p.2). The Ministry of Finance has allowed companies to use IAS on condition that they pay the tax amount based on the taxable income amount calculated following the Lebanese income tax law (El-Masri, 2005). In 1996, the Ministry of Finance required all companies to prepare their financial statements in conformity with IFRS (Anandarajan and Hasan, 2010; PwC, 2012).

2.9.4 The Lebanese Stock Exchange

The stock exchange in Lebanon is known as Beirut Stock Exchange (BSE); it is a public institution and ruled by the provisions of the BSE by law. It was established by a decree of the French Commissioner in 1920[19]; and trading was restricted to gold and foreign currencies until the early 1930s when trading was expanded to encompass shares of private companies set up under the French mandate to operate and manage some public services and sectors (Beirut Stock Exchange, 2012). Only 10 companies were listed in 2010; and the market capitalisation in 2007 was $10.85 billion and decreased to $9.64 in 2009; but increased in 2010 to $12.59 billion.

[18.] Corruption, high taxes, tariffs, and the lack of adequate protection of intellectual property are some examples of the obstacles.

[19.] It is the second oldest stock market in the region (BSE, 2012).

2.9.5 The Internet in Lebanon

The internet was first introduced to Lebanon in 1996 with 30 private internet service providers licensed by the government to provide a service mainly to Beirut (Feghali, 2003). According to Internet World Stats (2010b), the number of internet users in Lebanon in 2000 was 300,000 while the number of users in December 2010 was one million representing 24.24% of the population. Based on the above discussion, it is likely that IFR in Lebanon is going to be middling. The next section discusses Libya which is one of the North African countries.

2.10 Libya

2.10.1 Geographical and Political Background

Libya is one of the African countries situated in the central part of North Africa with total area of 1,759,540 square kilometres. The country is bounded by Tunisia and Algeria to the West, Egypt to the East, Sudan to the South East, Chad and Niger to the South, and the Mediterranean Sea[20] to the North. According to the CIA (2012g), the estimated population of Libya in 2012 was 6.6 million. The country's religion is Islam and Arabic is the official language; however, English and Italian languages are widely used in business.

Libya was under several foreign occupations for around 3000 years; this includes Phoenicians, the Greeks, the Romans, Arabs, Spain, the Ottoman Turkish Empire, and the Italians who supplanted the Ottoman Turks in 1911 and did not relinquish their hold until 1943 when defeated in World War II. Libya then passed to UN administration and achieved independence in 1951 (CIA, 2012g). After independence, Libya became a monarchy until 1969 when military officers declared a military coup, led by Muammar Al Gaddafi. The state was under the ruling of the

[20.] The length of coastline is nearly 2,000 km.

Gaddafi regime for 42 years until the revolution of Libyan people on 15 February 2011, as a part of the Arab Spring. On 5 March of the same year, the Libyan Interim Transitional Council (LINTC) was established in the Eastern part of the country[21] and became the revolutionary government. The LINTC formatted interim government and last the highest power in the country[22] until the elections of General National Congress's (GNC) members which took place on July 2012. The GNC's members have voted to choose the prime minister who in turn has formed an interim government, which expires once the completion of the preparation of the constitution and presidential elections are held.

2.10.2 Libya: Economic Background

Prior to the discovery of oil in 1959, the Libyan economy was based on agriculture (Ahmad and Gao, 2004) which was the backbone of the Libyan economy. After the discovery of oil and exported in commercial quantities from 1961, the country transformed from being in deficit to a state of surplus. By 1968, Libya had become the second largest oil producer in the Arab World (Kribat, 2009). As a result, Libyan's socio and economic indicators have increased at an exceptional rate (Mahmud and Russel, 2003). At the beginning of 1970s, the economy of the country was changed from capitalism to socialism (Kilani, 1988). By the end of the 1970s, most of the Libyan economic system was controlled by Gaddafi. According to the World Bank (2012c), GDP in Libya was $62.3 billion US Dollars as of 2009; and the inflation was 2.5% (the World Bank, 2012d).

[21.] The Eastern part of the country was out of Gaddafi's control; this lasted until Gaddafi was killed on 20 October 2011 near to Sirt which was the last city under ruling of Gaddafi.

[22.] On 16 September the majority of members of the General Assembly of the United Nations recognized the LINTC in Libya as a transitional government and eligible for a seat in the international organisation (United Nations, 2011)

2.10.3 Libya: Financial Reporting Environment

In 1953, the Libyan Commercial Code (LCC) was passed stipulating requirements for accounting practices, systems and reporting methods to be used by Libyan companies (Bait-El-Mal et al., 1973; Buzied, 1998). For instance, this code requires companies to prepare a balance sheet and profit and loss account at least once a year. Accounting practices in Libya influenced by several overseas sources such as the Italian Income Tax Law of 1923 (Kilani, 1988). During the 1950s, Libya was under British rule; and thus, the accounting profession was strongly influenced by British accounting standards and practices. However, these influences were largely replaced, during the 1960s, by that of the USA via American oil and non-oil companies that implemented American Generally Accepted Accounting Principles (GAAP) (Kilani, 1988). By the early 1960s, there was a need for the accounting profession to regulate accounting in the country and it was necessary to get a licence form the Ministry of Finance to act as an accountant[23]. Accounting services, mainly audit services, were provided by foreign accounting firms from Egypt, Italy, USA and the UK (Bait El-Mal, 1973). In 1973, the Law No. 116 was enacted to organise the Libyan accounting profession and establish the Libyan Accountants and Auditors Association (LAAA)[24]. The main responsibility of the LAAA is to license public accountants, maintain a register of public accountants, raise the standards of its members professionally, academically, culturally and socially, and suggest a code of ethics (Mahmud and Russell, 2003). The Libyan Stock Exchange has stated that companies on the exchange should adopt IFRS, but to date, none of them apply IFRS (PricewaterhouseCoopers, 2012).

[23.] By that time, any holder of university degree in commerce and two years of experience in accounting had the right to become a public accountant (Kilani, 1988).

[24.] The LAAA is not a member of International Federation of Accountants (IFAC, 2013).

2.10.4 The Libyan Stock Exchange

The Libyan stock exchange, which is officially known as the Libyan Stock Market (LSM), was established in 2006. It is the only stock exchange in the country. Most of the listed shares are in the financial sector, including private banks and insurance companies. The market capitalisation in 2010 was $2.90 billion with a small number of listed companies at that time (ten companies) (Libyan Stock Market, 2012).

2.10.5 The Internet in Libya

The internet is not widely used in Libya; this is because Libya was one of the most restrictive countries in the world; the government had no interest in providing a service (Arab IP Centre, 2012b). The price of internet access is quite high and the service is not all that good. Nevertheless the number of internet users in Libya has been increasing over the last few years and will continue to do so. According to the Internet World Stats (2010a), the number of internet users in Libya in 2000 was 10,000 whereas the number of internet users in 2010 was 353,900 representing 5.48% of the population. Based on the number of the listed companies, the date of the stock market establishment, and the number of internet users, IFR in Libya will likely be poor. Another North African country, Morocco is discussed in the next section.

2.11 Morocco

2.11.1 Geographical and Political Background

The Kingdom of Morocco is located in North West of Africa and covers an area of 446,550 square kilometres; the country has a coast by the North Atlantic Ocean (see Figure 2.1) and the coast line stretches up to the Mediterranean Sea. Morocco maintains an international border with Algeria to the East, Mauritania to the South, and Spain to the North and includes a water border

through the Strait of Gibraltar and land borders with two small Spanish autonomous cities, Ceuta and Melilla (Maps of World, 2012). According to the CIA (2012h), the estimated population of Morocco in July 2012 was 32.3 million. Ten percent of the population is located in Casablanca, which is the largest city in Morocco. Arabic is the official language in Morocco; however, Berber languages such as Tamazight are also considered to be an official language; Tachetlhit, and Tarifit are widely spoken; moreover, French is often spoken as the language of business, government, and diplomacy. Islam is the official religion of Morocco with 99% of the population Muslim, with the remainder being Christian and a few number of Jewish (CIA, 2012h). Morocco has been the home of the Berbers since the second millennium BC. In 46 AD, Morocco was annexed by Rome as part of the province of Mauritania until the Vandals overran this portion of the declining empire in the 5th century (Morokko-Info, 2012). In 685, the Arabs invaded Morocco and brought Islam to the region. Conflicts between Berbers and Arabs were chronic (Morokko-Info, 2012). Portugal and Spain began invading Morocco; but in 1660, Morocco came under the control of the Alawite dynasty. It is a Sherif dynasty-descended from the prophet Muhammad- and rules Morocco to this day. The Kingdom of Morocco gained its independence from France in 1956 and now it is under rule of King Mohammed VI an Alawite who took power since the end of July 1999 from his father King Hassan II (CIA, 2012h).

2.11.2 Morocco: Economic Background

Morocco has built a diverse, open, market-oriented economy because it has capitalised on its proximity to Europe and relatively low labour costs. In 1980, Morocco pursued austerity measures and pro-market reforms, overseen by the IMF. Since 1999, the country has had a stable economy marked by steady growth, low inflation, and generally declining government debt. Furthermore, a free trade zone near Tangier; industrial development strategies; and

infrastructure improvements have improved Morocco's competitiveness. A bilateral Free Trade Agreement with the US was signed in 2006, and Advanced Status Agreement with the European Union was signed in 2008. In 2011, the government's budget widened the country's current account deficit as a result of high food and fuel prices (CIA, 2012h).

2.11.3 Morocco: Financial Reporting Environment

The accounting standard-setting process relies on the National Accounting Council (NAC), which was established by decree in 1989 and made operational in 1991 (Anandarajan and Hasan, 2010). The NAC's mandate specifically encompasses the following tasks: i) design, develop, and propose accounting and sector standards; ii) recommend measures likely to improve accounting information; and iii) represent the government in international accounting standard-setting organisations (The World Bank, 2002). All companies must produce annual financial statements in accordance with Moroccan Accounting Standards (MAS), and listed companies are also required to produce semi-annual statements (The World Bank, 2010). Furthermore, companies are also required to provide consolidated accounts either in accordance with MAS or IFRS, while banks are required to prepare their consolidated accounts in accordance with IFRS only (The World Bank, 2010).

2.11.4 The Moroccan Stock Exchange

The Moroccan Stock Exchange, officially known as the Casablanca Stock Exchange (CSE), was established as long ago as 1929. However, there were some organisational shortcomings for more than 30 years; and in 1967, the market undertook reform to improve and regulate the Stock Exchange's organisation and operations (Casablanca Stock Exchange, 2012). 75 companies were listed in 2010. The market capitalisation of CSE in 2007 was $75.49 billion; however, this

value has decreased to $65.74 billion in 2008 due to the world crisis but increased to $69.15 billion in 2010.

2.11.5 The Internet in Morocco

The internet was first introduced in Morocco in 1995. The Moroccan Ministry of Industry, Trade and New Technologies started in April 2008 when as few as 3.4 percent of the population had a computer, and only 2,000 Moroccan schools were equipped with Information Communication Technology (ICT), and only 10 companies engaged in e-commerce (OpenNet Initiative, 2012). According to the Internet World Stats (2010a), the number of internet users in Morocco in 2000 was 100,000. However, statistics show that the number of internet users in Morocco in 2010 was 10.4 million representing 33.02% of the population. Based on the above, it is very likely that IFR in Morocco is going to be good. The next section discusses Oman which is one of the Middle Eastern countries.

2.12 Oman

2.12.1 Geographical and Political Background

Oman is one of the GCC countries located on South Eastern part of the Arabian Peninsula. The official name is the Sultanate of Oman. It shares a border with Yemen from the South, Saudi Arabia and the United Arab Emirates from the West, and the Strait of Hormuz from the North. Oman overlooks three seas; the Arabian Gulf, the Sea of Oman and the Arabian Sea (see Figure 2.1). It is the third largest country in the Arabian Peninsula with a total area approximating 309,500 square kilometers (Oman News Agency (ONA), 2012). According to Census-Oman (2010), the total population of Oman in 2010 was 2,773,479; this includes 816,143 expatriates. Arabic is the official language of Oman, however, English is widely used in both government

and commercial communications, and it is the only foreign language that is used in schools. According to CIA (2012i), 75% of Omani people are Ibadhi Muslim, and the other 25% includes Sunni Muslim, Shia Muslim, and Hindu.

The civilisation of Oman is believed to date back at least 5,000 years. In 1508, Muscat was occupied by the Portuguese until 1650. In 1659, Oman was taken by the Ottomans, who were driven out in 1741 by Imam Ahmed bin Said (Al-Jabri, 2008). During the period from 1891 to 1971, Oman was a British protectorate. In July 1970 Sultan Qaboos bin Said took power and it has achieved full international recognition since then and the country's name was changed from the Sultanate of Masqat and Oman to the Sultanate of Oman.

The governance system in Oman is a monarchy. On 6 November 1996, Sultan Qaboos issued a royal decree promulgating a law considered by the government to be a constitution which, among other things: clarifies the royal succession; provides for a prime minister; bars ministers from holding interests in companies doing business with the government; establishes a bicameral legislature; and guarantees basic civil liberties for Omani citizens (CIA, 2012i).

2.12.2 Oman: Economic Background

Like other oil-producing countries in the region, Oman's economy is mainly dependent on oil revenues as a major source of income (Al-Jabri, 2008). As a result, development activities and the economy in general are affected by oil prices. When Sultan Qaboos took over the power of the country in 1970, he utilised the income from oil in development programs in all sectors of the economy. According to the World Bank (2012c), the GDP of Oman in 2011 is $71.8 billion and inflation is 4.1% (the World Bank, 2012d).

2.12.3 Oman: Financial Reporting Environment

There are many laws that provide the basic legal framework for business activity and financial reporting in Oman; these laws are: Commercial Companies Law, 1974; Commercial Register Law, 1974; Accounting and Auditing Profession Law, 1986, and Capital Market Authority Law, 1998. For instance, the Commercial Companies Law requires companies to prepare at least an annual balance sheet and profit and loss statement. The law contains general principles for corporate financial reporting (Al-Jabri, 2008). All listed companies in Oman are required by the Accounting and Auditing Profession Law to comply with IASs from 1986.

2.12.4 The Omani Stock Exchange

The stock market in Oman is called the Muscat Securities Market (MSM); it is the only stock market in Oman and was established in 1989. In 1999, the former MSM was split into three independent entities[25] by the Capital Market Law (Muscat Securities Market, 2012). The number of listed companies on MSM in 2010 was 114 companies distributed across three sectors which are: financial, industrial, and services. Like other stock markets, MSM was affected by the crisis in 2008. This can be seen through the market capitalisation values of MSM before and after the crisis, which was $23.06 billion in 2007; this value decreased to $14.91 billion in 2008. However, this value started to increase to reach $20.27 billion in 2010 (The World Bank, 2012).

2.12.5 The Internet in Oman

Oman joined the internet in 1996 with a few number of users in that time. However, this number started to increase year after year. According to the Internet World Stats (2010b), the number of

[25.] The three entities are: the exchange itself (MSM); a central depository- Muscat Depository and Securities Registration Company (MDSRC); and a regulatory authority- Capital Market Authority (CMA).

users in Oman in 2000 was 90,000 representing 3.8% of the population in that year. This number started to increase to reach 1.24 million users in 2010 representing 45.24% of the population. Hence, IFR in Oman may be good. Palestine, a Middle East country, is discussed in the next section.

2.13 Palestine

2.13.1 Geographical and Political Background

The term Palestine often refers to the Palestinian state which incorporates two Palestine territories: the West Bank and the Gaza Strip. Palestine lies to the West of the Asian continent; it constitutes the South Western part of a huge geographical unity in the Eastern part of the Arab world. Palestine used to have common borders with Lebanon, Syria, Jordan, and Egypt. The estimated population of Palestine in July 2012 was 4.3 million (CIA, 2012n; CIA, 2012o). Arabic is the official language; however, Hebrew is spoken by many Palestinians and English is widely understood. Islam is the official religion with 87.15% of the population identifying Muslim and 12.85% themselves as Jewish and Christian (CIA, 2012n; CIA, 2012o). The history of Palestine dates back to prehistory when the city of Jericho was found. In the Iron Age, Palestine was under control of Phoenician and then Canaan; this was followed by the Persian Empire, Hellenistic, Roman period, Islamic Rule which was succeeded by British Mandate. Finally, Palestine has been occupied by Israel from 1948 until 1994 when the National Palestinian Authority was formed and designated control over the Gaza Strip and the West Bank; more recently, in 2013, the UN recognised the State of Palestine as a non-member observer state in the UN.

2.13.2 Palestine: Economic Background

The West Bank, which is the larger of the two areas comprising the Palestinian territories, has experienced a relatively high single-digit economic growth rate since 2008, but this rate has been sustained by inflows of donor aid rather than private sector economic activity. Despite the Palestinian Authority's (PA) implementation of economic and security reforms and the easing of some movement and access restrictions by the Israeli Government in 2010, Israeli closure policies continue to disrupt labour and trade flows, industrial capacity, and basic commerce, eroding the productive capacity of the West Bank economy. The other part of Palestine, the Gaza Strip, has a high population density and Israeli security controls, placed since the end of the second intifada, have degraded economic conditions in this territory. Israeli-imposed border closures, which became more restrictive after Hamas won a majority of the seats in the Palestinian Parliament and then controlled the territory in June 2007, have resulted in high unemployment, elevated poverty rates, and the near collapse of the private sector that had relied up on export markets. The population is reliant on large-scale humanitarian assistance, led by UN agencies. Changes to Israeli restrictions on imports in 2010 resulted in a rebound in some economic activity, but regular exports from Gaza are still not permitted (CIA, 2012n; CIA, 2012o).

2.13.3 Palestine: Financial Reporting Environment

The accounting and reporting standards in Palestine generally conform to International Accounting Standards (IAS) or to the USA’s Generally Accepted Accounting Principles (GAAP). The Company Law No. (12), which was issued in 1964, requires all public and private companies, including foreign owned, to prepare audited financial statements by a certified public accountant along with a statutory annual report within three months of the end of the fiscal year

to the companies registrar (Palestinian Investment Promotion Agency, 2012). According to the World Bank (2010b), all regulated entities subject to the Palestine Monetary Authority (PMA) and Palestine Capital Markets Authority (PCMA) regulations (such as financial institutions, insurance companies and listed companies) are required to follow IFRS.

2.13.4 The Palestinian Stock Exchange

The Palestine Exchange (PEX) was established in 1995 to promote investment in the country. It commenced trading activities in February 1997 with 8 listed companies. The PEX was fully automated upon establishment- a first amongst the Arab Stock Exchanges. In February 2010, the PEX became a public shareholding company under the supervision of the Palestinian Capital Market Authority with 40 listed companies. The weakness of financial disclosure and little public awareness about securities has weakened the liquidity and volume of trading (Awad and Daraghma, 2009; Shaheen, 2010). Unlike some other MENA Exchanges, the PEX experienced a minimum level of impact from the global financial crisis (Palestine Exchange, 2012). The market capitalisation in 2007 was $2.47 billion and decreased to $2.1 billion in 2008 but increased to $2.45 billion in 2010.

2.13.5 The Internet in Palestine

Birzeit University, which is one of the first Palestinian institutions in the West Bank and Gaza to use the internet, launched its web site in 1994 (Hanieh, 1999). According to the Internet World Stats (2010b), the number of internet users in Palestine in 2000 was only 35,000 users; this number increased to 356,000 users in 2010 representing 8.64% of the population. However, IFR in Palestine will be poor and this is because of the size of the PE. Qatar, one of the GCC countries, is discussed in the next section.

2.14 Qatar

2.14.1 Geographical and Political Background

The formal name of Qatar is the State of Qatar; its territory comprises a number of islands. It is located in the Middle East and lies halfway along the West Coast of the Arabian Gulf. Saudi Arabia, which borders Qatar from the West, is the only neighbouring country to Qatar (see Figure 2.1). It is a peninsula which extends northward covering an area of 11,586 square kilometres. Doha is the capital city, and is the location of the government and the main commercial and financial institutions. The population of Qatar in 2010 was 1,699,435 (Census-Qatar, 2010). This compares to about 522,000 in 1997. Arabic is the official language, however, English is widely spoken. Islam is the official religion of Qatar with 77.5% of the population identifying as Muslim, 8.5% of the population is Christian, and 14% others (CIAj, 2012).

During the period from 1871 to 1916, Qatar was occupied by Ottoman Turks. In 1916, Qatar became a British protectorate until 1971 when Qatar gained its independence. In 1995, Sheikh Khalifa was deposed by his son, Hamad, in a bloodless coup (BBC-Qatar, 2012). The political system in Qatar is constituted as an institutional monarchy under the Emir, Sheikh Hamad bin Khalifa Al Thani. The Council of Ministers is the supreme executive authority and is presided over by the Emir of Qatar (Althani, 2010).

2.14.2 Qatar: Economic Background

Oil and gas are the main source of government revenues which account for about 70% of government revenues and roughly 85% of export earnings. In the last few years, Qatar has prospered with continued high real GDP growth in 2011 (CIA, 2012j). Economic policy focuses on developing Qatar's non-associated natural gas reserves and increasing private and foreign

investment in non-energy sectors. Qatar has the second highest per-capita income country in the world with the lowest unemployment (CIA, 2012j). According to the World Bank (2012c), the GDP of Qatar in 2011 was $173 billion; and inflation was 1.9% (the World Bank, 2012d).

2.14.3 Qatar: Financial Reporting Environment

The accounting and auditing systems in Qatar were in a primitive stage in the beginning 1970s; this is because accounting and auditing practices were no more than mere judgment by practicing accountants and auditors without any official guidelines (Al-Khater and Nasser, 2003). In 1974, the Qatari authorities published Law No. 7 that formed the framework to external auditors; this was followed by Law No. 11 in 1981 which gives broad guidelines about the way that companies should operate in Qatar (Naser et al., 2006). Financial reporting by listed companies in the Qatari Exchange is governed by both company law and securities market law. The company law contains general principles for corporate financial reporting; it requires companies to prepare at least a balance sheet and profit and loss statement (Hossain and Hammami 2009). Moreover, it requires all companies to maintain proper books of account and to prepare and submit audited annual financial statements to their shareholders and these must be submitted to the Ministry of Economy and Commerce within six months of the end of the financial year. According to Global Connections (2012), there is no local GAAP in Qatar and financial reporting is based on IFRS.

2.14.4 The Qatari Stock Exchange

The Qatar Exchange (QE), which was named the Doha Securities Market (DSM), was established in 1995; however, it officially started its operations in 1997. The Qatar Exchange aims to support Qatar's economy by providing a venue for capital raising for Qatari companies as part of their corporate strategy and giving investors a platform through which they can trade

a variety of products in a transparent and efficient manner (Qatar Exchange, 2012). According to QE, there were 42 companies listed in 2010. The Qatar Exchange was affected by the world crisis in 2008; the market capitalisation of QE in 2007 was $95.49 billion. This value decreased to $76.31 billion in 2008 but increased over the next couple of years to reach $123.59 billion in 2010.

2.14.5 The Internet in Qatar

The State of Qatar is an advanced country regarding the types and generations of technology present in the country; public internet access in Qatar has been available since June 1996 (Burkhart and Goodman, 1998). According to World Internet Stats (2010b), internet users in 2000 were only 30,000; however, this number has increased more than 50 fold and reached 436,000 users in 2010 representing 25.65% of the population. Hence, it is very likely that IFR in Qatar is going to be good. Saudi Arabia, which is another GCC country, is discussed in the next section.

2.15 Saudi Arabia

2.15.1 Geographical and Political Background

The Kingdom of Saudi Arabia is the largest country in the Arabian Peninsula with a total area of 2,150,000 square kilometres. It is bounded by Yemen and Oman to the South, Jordan, Iraq, and Kuwait to the North, Qatar, the United Arab Emirates, and the Arabian Gulf to the East, and the Red Sea to the West (see Figure 2.1) (Ministry of Foreign Affairs, 2010). The total population of the kingdom is 27 million; 31% are foreign residents. The capital city is Riyadh (Saudi embassy in USA, 2012). Arabic is the official language of Saudi Arabia and Islam is the official religion (Saudi embassy in USA, 2012).

The history of Saudi Arabia dates back to the 18th century when the first country was established by Al-Imam Mohammad Bin Saud in 1744. However, this country fell to the attack of the Outmani nation and the Egyptian ruler, Mohammad Ali Basha in 1818 (Ministry of Foreign Affairs, 2010). Over the next 70 years there was internal conflict between the invasion by the Egyptian military and rival tribes which facilitated the removal of the Saudi ruling family (Ministry of Foreign Affairs, 2010). In 1902, the new country was established by King Abdulaziz Al Saud who declared the unity of the nation and called the country the Kingdom of Saudi Arabia (KSA) (Ministry of Foreign Affairs, 2010).

The governance system in the Kingdom of Saudi Arabia is a centralised system limited to male descendants of King Abdulaziz. The king is the head of the Council of Ministers[26], which organises and coordinates the various branches of government (Library of Congress - Federal Research Division, 2006).

2.15.2 Saudi Arabia: Economic Background

The Kingdom of Saudi Arabia has a robust economy which is largely dependent on the production and exportation of oil. According to Library of Congress - Federal Research Division; country profile: Saudi Arabia (2006; P: 9) "Saudi Arabia produces more oil and natural gas liquids than any other country in the world". Since the 1970's, the Saudi government has used five-year development plans to try to make its economy less susceptible to fluctuations in oil prices. However, the development of the non-oil economy has proceeded slowly. According to the World Bank (2012c), the GDP of Saudi Arabia in 2011 was $577 billion and inflation was 5% (the World Bank, 2012d).

[26.] The Council of Ministers is responsible for drafting legislation to be presented to the king.

2.15.3 Saudi Arabia: Financial Reporting Environment

In 1965, Companies Regulation was issued by the Royal Decree (No. M/6); it requires companies to prepare financial statements and to be audited by a licensed Certified Public Accountant (Saudi Organisation for Certified Public Accounting, 2012). In 1950, the Income Tax regulations in Section 16 required the financial statements to be audited by a globally certified accountant (Falgi, 2009). According to PwC (2012), IFRS is required for all banks and insurance companies regulated by the Saudi Arabian Monetary Agency (Central Bank); other entities are required to use Saudi GAAP.

2.15.4 The Saudi Stock Exchange

The Saudi Stock Exchange is officially named Tadawul; it dates back to the mid 1930's. By 1975 there were 14 public companies. However, the market remained informal until 1984 when a Ministerial Committee (Ministry of Commerce and Saudi Arabian Monetary Agency (SAMA)), composed of the Ministry of Finance and National Economy, was formed to regulate and develop the Market (Tadawul, 2012). The number of listed companies in 2010 was 140 companies; and the market capitalisation of the Tadawul was affected by the global crisis in 2008, which was $515.1 billion in 2007 and decreased in 2008 to $246.3 billion; however, this value has increased again to reach $353.4 billion in 2010.

2.15.5 The Internet in Saudi Arabia

Saudi Arabia was the last GCC country to use the internet which was not being widely available until 2001 (Arab IP Centre, 2012d). The number of internet users started from 200,000 in 2001 to 9.8 million in 2010 representing 38.09% of population (Internet World Stats, 2010b). Hence,

it is expected, according to the parameters detailed above, IFR in Saudi Arabia is going to be good. Syria, which is a Middle East country, is discussed in the next section.

2.16 Syria

2.16.1 Geographical and Political Background

The Syrian Arab Republic lies at the Eastern end of the Mediterranean Sea. It is bordered by Jordan on the South, Turkey on the North, Iraq on the East, and Lebanon and Israel on the West. In the East is the Syrian Desert and in the South is the Jebel Druze Range (Library of Congress - Federal Research Division, 2005). The total area of Syria is 185,189 square kilometres; the estimated population in July 2012 was 22.5 million; Arabic is the official language in addition to Kurdish, Armenian, and Circassian which are widely understood; furthermore, French and English are somewhat understood; Islam is the official religion (90%), Christian is the second religion (10%) in addition to tiny communities of Jewish (CIA, 2012m). Syria was occupied successively by Canaanites, Phoenicians, Hebrews, Arameans, Assyrians, Babylonians, Persians, Greeks, Romans, Nabataeans, Byzantines, and, in part, Crusaders before finally coming under the control of the Ottoman Turks who remained for 400 years from 1517. In 1920, an independent Arab Kingdom of Syria was established under King Faysal of the Hashemite family. However, his rule over Syria ended after only a few months; and then Syria came under French mandate until 1940. Continuing pressure form Syrian nationalist groups forced the French to evacuate their troops and Syria gained its independence in April 1946 (Global Edge, 2012d). The government type of Syria is a republic under an authoritarian regime (CIA, 2012m). The current president is Bashar Al-Assad who took power after the death of his father Hafez Al-Assad in 2000. Bashar followed his father's way and nothing has changed in Syria. As a part of the Arab spring in 2011, protests in Damascus and the southern city of Deraa demanded the

release of political prisoners. Security forces shoot protests and a number of people have been killed; Syrian people are continuing to protest and fight the Al-Assad regime for their freedom as at the time of writing this study (CIA, 2012m).

2.16.2 Syria: Economic Background

Syria is a developing country with an economy based on agriculture, industry, tourism, and oil. However, this economy began to face serious challenges and impediments to growth even prior to the Arab Spring in March 2011 (Global Edge, 2012d). As a result, levels of industrial and agricultural productivity as well as the rates of investment have been reduced. According to CIA (2012m), the GDP of Syria in 2010 was $111.5 billion whereas in 2011 it was $107.6 billion indicating a reduction of the growth rate from 3.4% to -2%.

2.16.3 Syria: Financial Reporting Environment

Accounting in Syria has been influenced by the French accounting system (Kamla et al., 2012). After Syria's independence, the economy became socialist-oriented; as a result, accounting was strongly geared to macro-economic planning and public ownership of productive resources, and the first Syrian Unified Accounting System was issued in 1978 (Kamla et al., 2012). In 1999, the Association of Syrian Certifies Accountants (ASCA)[27] endorsed 20 standards; these standards were directly taken from the IAS (Gallhofer et al., 2011).

[27.] This association was established in 1958.

2.16.4 The Syrian Stock Exchange

The stock exchange in Syria is known as the Damascus Securities Exchange (DSE), it is a public institution. The market was established on 1/10/2006 to facilitate the investment of financial resources and to provide and facilitate the required capital to expand economic activities by implementing an appropriate trading environment for the trading of securities (Damascus Securities Exchange, 2012). Only 18 listed companies were in 2010 with $1.7 billion market capitalisation at the same year.

2.16.5 The Internet in Syria

The internet was first introduced in Syria in 2000; it is controlled by the Syrian Government. According to the Internet World Stats (2010b), the number of internet users in Syria in 2000 was 30,000; this number increased more than 130 times to reach 3.9 million users in 2010 but represents only 17.73% of the population. Thus, it seems that IFR in Syria is going to be poor. One of the North Africa countries, Tunisia, is discussed in the next section.

2.17 Tunisia

2.17.1 Geographical and Political Background

Tunisia is a country in Northern Africa bordering the Mediterranean Sea; it is bordered on the West by Algeria and by Libya on the South (see Figure 2.1). The geography of Tunisia consists of mountains in the north and a semi-arid south that merges into the Sahara; the total area of Tunisia is 163,610 square kilometres. The estimated population of Tunisia in July 2012 was 10,732,900 (CIA, 2012k). Three languages are used in Tunisia: i) Arabic, which is the official language; ii) French, which is used in business; and iii) Tamazight, which is used by the Berbers. The majority of people of Tunisia are Muslim (98%); and the other 2% are Christian (1%) and

Jewish (1%). The history of Tunisia dates back to the 8th century BC when Carthage became a major sea power, clashing with Rome for control of the Mediterranean until it was defeated and captured by the Romans in 146 BC until the 5th century. In the 7th century, Tunisia was invaded by Muslims and became a centre of Arab culture and learning and was assimilated into the Turkish Ottoman Empire in the 16th century. The period from 1881 until independence in 1956, Tunisia was a French protectorate and was affected by political, economic, and culture with France. The government system is a republic; the chief of the country is the President and the head of government is the Prime Minister (Global Edge, 2012b).

2.17.2 Tunisia: Economic Background

Tunisia has a mixed economic system in which there is a variety of private enterprises combined with centralised economic planning and government regulation. Manufacturing industries as well as tourism income are major sources of foreign currency revenue. The Tunisian Government has implemented several programs, working with the European Commission and other partners, to upgrade the capacity of key industrial sectors to remain competitive while the country gradually opens to trade with Europe and other regions (Global Edge, 2012b). According to the World Bank (2012c), the GDP of Tunisia in 2011was 45.86 billion and inflation was 3.6% (the World Bank, 2012d).

2.17.3 Tunisia: Financial Reporting Environment

All listed companies are required by Commercial Law to prepare and publish audited consolidated financial statements in conformity with Tunisian GAAP (The World Bank, 2006). IFRS is prohibited for the preparation of financial statements for any listed companies (PwC,

2012). According to Anandarajan and Hasan (2010), the Tunisian accounting standards are not fully compliant with IFRS.

2.17.4 The Tunisian Stock Exchange

The Tunis Stock Exchange (TSE), which is also known as Bourse de Tunis, was created in 1969 as public establishment; in 1994, the stock market was reorganised where the functions of control and management were separated. Foreign ownership of shares is allowed up to 49%. Companies must meet a number of disclosure requirements in order to be listed on the stock market. According the Tunis Stock Exchange, 55 companies were listed in 2010. Unlike other countries in this study, the market capitalisation of Tunis Stock Exchange was not affected by the world crisis where the market capitalisation in 2007 was $5.36 billion; this value increased in 2008 to become $6.37 billion, $9.12 billion in 2009, and in 2010 was $10.68 billion.

2.17.5 The Internet in Tunisia

The use of the internet in Tunisia is fairly widespread compared to most Arab countries. The reason behind this is because Tunisia offers internet access at a much lower cost than other Arab countries (Arab IP Centre, 2012e). According to Internet World Stats (2010a), the number of internet users in Tunisia in 2000 was 100,000; this number of users has increased dramatically in 2010 to become 3.6 million users representing 34% of population. Hence, it seems that IFR in Tunisia is going to be poor. United Arab Emirates, which is one of the Middle East countries, is discussed in the next section.

2.18 United Arab Emirates

2.18.1 Geographical and Political Background

The United Arab Emirates (UAE) is located in the Eastern part of the Arabian Peninsula; it extends along part of the Gulf of Oman and the Southern coast of the Persian Gulf (see Figure 2.1). The UAE covers an area of approximately 83,600 square kilometres (CIA, 2012L). The nation is bordered by the Arab Gulf from the North, Gulf of Oman and the Sultanate of Oman from the East, the Kingdom of Saudi Arabia and the Sultanate of Oman from the South, and the State of Qatar and the Kingdom of Saudi Arabia from the West (Government.ae, 2012). Most of the land is barren and sandy. According to the CIA (2012L), the estimated population of the UAE in July 2012 was 8,264,070. Arabic is the official language in the UAE as well as some other languages such as Persian, English, Hindi, and Urdu. Islam is the majority religion (96%) in the country in addition to Christian and Hindu. Originally, the area was inhabited by a seafaring people who converted to Islam in the 7th century. From the 1850's until the union of the Emirates in 1971, the British colonial administration maintained influence in the region and each Emirate entered into separate treaties with the British. The Emirates were then collectively known as the Trucial States of Sheikhdoms. The British withdrew from the Persian Gulf in 1971, and the region became a federation called the United Arab Emirates[28] (UAE) (Global Edge, 2012c). Regarding the political system, there are no elections of legal political parties in the UAE. Power rests with the seven hereditary Sheikhs, and hence every area that is ruled by an Emir is known as an Emirate; and then they choose a president from among themselves.

[28.] The region included 9 Trucial states; 2 of which were Bahrain and Oman and both chose not to join the federation, reducing the number of states to 7 states which are known as: i) Abu Dhabi; ii) Ajman; iii) Dubai; iv) Fujairah; v) Ras Alkhaymah; vi) Sharjah; vii) Umm Al Qaywayn.

2.18.2 The UAE: Economic Background

Pearl production, fishing, agriculture, and herding dominated the UAE economy until the discovery and export of oil in 1962. Since that time, petroleum has dominated the economy, especially from 1973 when oil prices rose. Manufactured goods, machinery, and transportation equipment together accounted for 70% of total imports in the country (Global Edge, 2012c). The Jebel Ali complex in Dubai, which is a free trade zone for manufacturing and distribution, has more than 6,000 companies from more than 120 countries.

2.18.3 The UAE: Financial Reporting Environment

All companies are required by Federal Commercial Companies Law No. 8 of 1984 to prepare audited annual accounts and reports on their activities during the financial year. The annual accounts and reports on the activities must be signed by the chairman and presented by the board of directors to the general meeting, which must be held within four months after the end of the company's financial year. Accounting practices and principles are not codified in the UAE but companies generally follow IFRS.

2.18.4 The Emirati Stock Exchanges

The UAE has three official stock exchanges; the Dubai Financial Market (DFM), which was established in March 2000, the Abu Dhabi Securities Exchange (ADX), which was established later in November 2000, and the Dubai International Financial Exchange (DIFX), which commenced business in 2004. The first two exchanges operate as a secondary market for trading of securities issued by public shareholding companies, bonds issued by the local or the federal government, public institutions and financial and investment institutions. The main objective of the exchanges is to create a fair, efficient and transparent market place that serves the interest of

the national economy. The DIFX, which was recently named as NASDAQ Dubai, is located in a financial free zone; its financial activities are governed to international standards by an independent regulator (the Dubai Financial Services Authority) and it was set up to trade international stocks (Oyelere and Kuruppr, 2012). Both DFM and ADX will be included in this thesis with 107 listed companies in 2010. According to the Global Stock Markets – Factbook (2013), the market capitalisation of UAE listed companies in 2007 was $121.11 billion and decreased to $68.81 billion in 2008 as a result of the world crises; and continued decreasing to $77.08 billion in 2010.

2.18.5 The Internet in Emirates

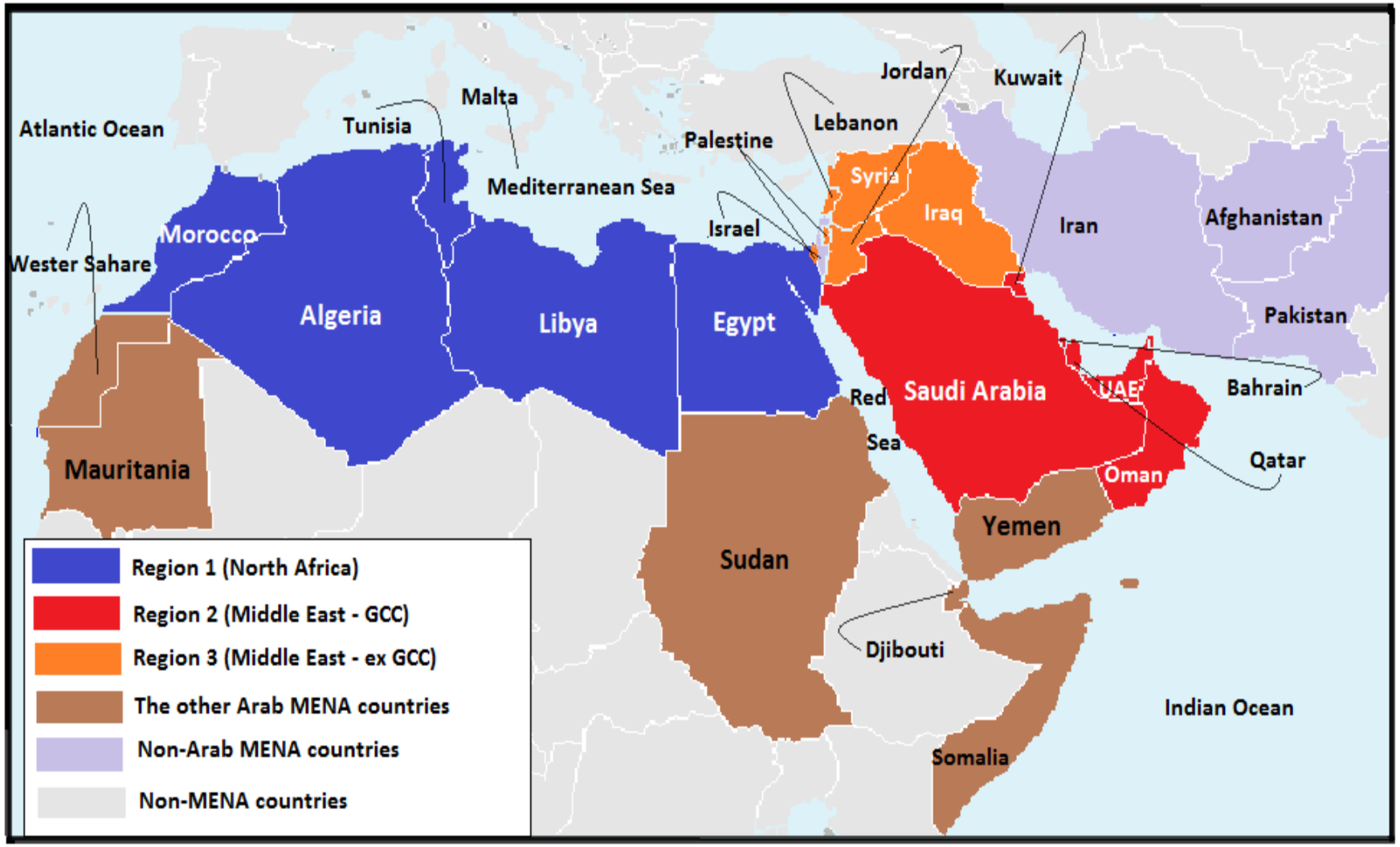
The internet was first introduced to the UAE in 1995; it was provided to all categories of users, including academic, business, Industry, and home users. The UAE has been classified as the most wired country in the Arab World (Ayish, 2005; Warf and Vincent, 2007). The country has implemented copyright laws and started a policy of increasing freedom and curbing censorship and control (Kirat, 2007). According to the Internet World Stats (2010a), the number of internet users in UAE in 2000 was 735,000 and has grown exponentially and reached 3.8 million in 2010 representing 75.93% of the population. Based on the above, it is very likely that IFR in UAE is going to be good. The next section gives a summary of this chapter.

2.19 MENA Regions

As was mentioned in the introductory part of this chapter that Arab MENA countries, consist of two regions the Middle East and North Africa; this study examines the effect of the region on IFR adoption. For further investigation, the Middle East region was divided into two regions: i) Middle East-GCC countries; and ii) Middle East-Non GCC countries as shown in Figure 2.2.

Table 2.4 thus compares three regions: i) North Africa region (Algeria, Egypt, Libya, Morocco, and Tunisia); ii) Middle East-GCC region (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and UAE); and iii) Middle East-Non GCC region (Iraq, Jordan, Lebanon, Palestine, and Syria).

Figure 2.2: Map of Arab MENA Countries by Regions



Source: developed for this study.

Table 2.4: Some Arab MENA Countries' Indicators by Regions

Region														
North Africa					Middle East									
					Non-GCC					GCC				
Country	ASFLC	MC	LC	IU	Country	ASFLC	MC	LC	IU	Country	ASFLC	MC	LC	IU
Algeria	IFRS	0.091	6	14%	Iraq	IFRS	2.8	85	1%	Bahrain	IFRS	20.43	43	88%
Egypt	Egyptian GAAP	82.50	218	21%	Jordan	IFRS	30.86	275	27%	Kuwait	IFRS	119.62	218	39%
Libya	IFRS*	2.99	10	5%	Lebanon	IFRS	12.59	10	24%	Oman	IFRS	20.27	114	45%
Morocco	IFRS or MAS**	69.15	75	33%	Palestine	IFRS	2.45	40	9%	Qatar	IFRS	123.59	42	26%
Tunisia	Tunisian GAAP	10.68	55	34%	Syria	IFRS	1.7	18	18%	Saudi	IFRS	353.41	140	38%
										UAE	IFRS	77.08	107	76%
		165.4	364	22%			50.4	428	11%			714.4	664	44%

Note: this table shows the three Arab MENA regions' indicators; ASFLC= Accounting Standards for Listed Companies; MC= Market Capitalisation of the Stock Market in 2010 ($ Billion); LC= No. of Arab MENA listed companies in 2010; IU= the percentage of population with internet usage in 2010. * The LSM has stated that the companies on the exchange should adopt IFRS, but to date, none of them applies IFRS. ** MAS= Morocco Accounting Standards.

Table 2.4 shows that the majority of Arab MENA listed companies in the three regions are adopted IFRS. However, the table shows that 46% of Arab MENA listed companies are in Middle East-GCC region; whereas 29% are listed in Middle East-Non GCC region; and 25% are listed in North Africa region; this indicates that nearly half of these companies are listed in Middle East-GCC region. Moreover, the table shows that market capitalisation of the stock exchanges that located on GCC region is higher than the other two regions. Comparing the other two regions, it can be seen that the market capitalisation of Non-GCC stock exchanges are less than 50% of the market capitalisation of North Africa stock exchanges. In similar order, the table shows that the number of internet users in GCC region is higher than the other two regions; whereas in Non-GCC region is lower than GCC and North Africa regions. Overall, the table shows differences between regions indicating potential effect of region on IFR adoption and community of practice by listed companies within one region may be existed; this will be investigated later in Chapter 7 of this thesis. Summary of this chapter is in the next section.

2.20 Summary

This chapter has highlighted and discussed the key themes related to the countries of the MENA region. It was found that there is no specific definition for the MENA. However, MENA countries can be divided into two groups: i) Arab MENA countries; and ii) non-Arab MENA countries. Among the Arab MENA countries, 16 have stock markets and thus, all these 16 countries were reviewed in term of geographical and political background, economic background, financial reporting environment, stock market, and internet coverage. These countries differ economically; some countries, such as GCC countries, have a high Gross National Income (GNI) per capita (see Table 2.2), the other countries are upper middle or lower middle GNI; but, none of these countries were classified as low GNI. The official language of

all these countries is Arabic and the majority of the population is Muslim. Moreover, the historical background reveals that these countries were occupied by the Ottoman Empire and then, for most of them, by Britain. As a result, the financial reporting in most of these countries has been affected by the British accounting system. This indicates that these countries, arguably, may share a similar culture. Table 2.5 displays a summary of information about these countries.

Table 2.5: Some Arab MENA Countries' Indicators

No	Country	Accounting Standards for Listed Companies	Market Capitalisation of the Stock Market (2010) ($ Billion)	No. of listed companies (2010)	(%) population with internet (2010)	Expected IFR
1	Algeria	IFRS	0.091	6	14%	Poor
2	Bahrain	IFRS	20.429	43	88%	Good
3	Egypt	Egyptian GAAP	82.495	218	21%	Medium
4	Iraq	IFRS	2.796	85	1%	Poor
5	Jordan	IFRS	30.864	275	27%	Medium
6	Kuwait	IFRS	119.621	218	39%	Good
7	Lebanon	IFRS	12.586	10	24%	Medium
8	Libya	IFRS*	2.989	10	5%	Poor
9	Morocco	IFRS or MAS**	69.153	75	33%	Good
10	Oman	IFRS	20.267	114	45%	Good
11	Palestine	IFRS	2.450	40	9%	Poor
12	Qatar	IFRS	123.592	42	26%	Good
13	Saudi	IFRS	353.414	140	38%	Good
14	Syria	IFRS	1.700	18	18%	Poor
15	Tunisia	Tunisian GAAP	10.682	55	34%	Poor
16	UAE	IFRS	77.081	107	76%	Good

Note: this table shows some indicators of Arab MENA countries. * The LSM has stated that the companies on the exchange should adopt IFRS, but to date, none of them applies IFRS. ** MAS= Morocco Accounting Standards.

Table 2.5 shows that the majority of the Arab MENA countries' listed companies are required to prepare their financial statements in accordance with IFRS except Egypt and Tunisia, which both use their local GAAPs. Moreover, the table shows that market capitalisation of Arab MENA stock exchanges varies from $0.091 billion in Algeria to $353.414 billion in Saudi Arabia. In

addition, it provides a picture of internet users in these countries; it shows that while 88% of Bahrain population uses the internet, only 1% of Iraq population uses the internet. This indicates that the extent of IFR in these countries may be different despite the similarity in historical background. This will be investigated in Chapter 6. The next chapter reviews the literature related to IFR around the world.

Chapter 3: Literature Review

Chapter 3

Literature Review

3.1 Introduction

This thesis investigates internet financial reporting (IFR) in Arab MENA countries; hence, this chapter first discusses financial reporting and what underpins financial reporting. This chapter explores the literature relating to (IFR) including financial reporting, disclosure, and the internet in general. Most of the literature in this study is from developed countries, specifically from the USA and UK, but this literature may reflect Arab MENA countries today, and so is relevant to this thesis. The rest of this chapter is set out as follows: the reasons for financial reporting are discussed in section 3.2; and the conceptual framework for financial reporting including: the objective of financial statements; users of financial statements; the qualitative characteristics of financial information; and elements of financial statements are considered in section 3.3. This is followed by three sections 3.4 to 3.6 that cover disclosure, the internet, and internet financial reporting; respectively section 3.7 reviews previous studies that have examined internet financial reporting in Arab MENA countries. Section 3.8 discusses factors that may affect voluntary financial disclosure via the internet. Finally, Section 3.9 summarises this chapter.

3.2 The Reasons for Financial Reporting

Conveying relevant accounting information to interested parties is the fundamental purpose of accounting (Nobes, 1992). However, a review of the literature suggests that more than one definition for accounting exists. For instance, Marriott et al. (2002) define accounting as the language of business; they state that:

> "Accounting is a data-processing system that has been vividly described as the (language of business). It may be defined as a system for recording and reporting business transactions, in financial terms, to interested parties who use this information as the basis for performance assessment, decision-making and control." (p.1)

Mukherjee and Hanif (2003) provide a set of definitions that describe accounting as:

> "Accounting is an art of recording, classifying, summarising and reporting of transactions with the aim of showing the financial health of an entity- a business unit, a club, a charitable organisation, etc., one which has its incomes and expenses. Accounting may be defined as a body of principles and conventions as well as an established general process for capturing financial information related to entity's resources and their use in meeting the entity's goals. It is a field of specialisation critical to the functioning of all types of organisation." (p.1)

In contrast, Weygandt et al. (2010) relate accounting to the number of activities that are concerned with the economic events of an organisation:

> "Accounting consists of three basic activities- it identifies, records, and communicates the economic events of an organisation to interested users." (p.4)

From the above mentioned definitions, it can be concluded that accounting is a process which starts with analysing and registering the economic events of an organisation and ends with preparing reporting in financial terms for interested users and to communicate financial information. In other words, accounting, as an information system, can be divided into three elements: inputs, processing, and outputs. Financial reporting is the output of the accounting information system. The picture of financial accounting and reporting is, or should be, underpinned by a conceptual framework for financial reporting.

3.3 The Conceptual Framework for Financial Reporting

Conceptual frameworks that have been developed by the accountancy profession in various countries start with the common assumption that financial statements must be useful to decision

making (Weetman, 2006). According to Weetman (2006), the most widely applicable framework for preparing useful information was The Framework for the Preparation and Presentation of Financial Statements produced by the International Accounting Standard Committee (IASC)[29] in 1989. From the US, UK, and IASB perspectives, Table 3.1 shows a history of some of the developments in financial reporting, beginning with the US Trueblood Report published in October 1973; this was followed by the Corporate Report which was published by the UK Accounting Standards Steering Committee (ASSC)[30] two years later. This was followed by the FASB in the US, which issued SAFC 1: Objective of Financial Reporting by Business Enterprises, in 1978; the SAFC 2: Qualitative Characteristics of Accounting Information, in 1980; and the SAFC 6: Elements of Financial Statements, in 1985. At the international level, in July 1989, the IASC published its Conceptual Framework; this framework was an attempt to underpin the development of harmonisation, accounting standards and procedures relating to the preparation and presentation of financial statements (IASC, 1989). Ten years later, the Accounting Standard Board (ASB) in the UK issued its Statement of Principles for Financial Reporting (SPFR) in December 1999. Finally, the IASB issued the new Conceptual Framework for Financial Reporting in September 2010 (IASB, 2010) which includes two new chapters and the remaining chapters of the 1989 IASC framework.

[29] IASC was founded in 1973, then, it became the International Accounting Standards Board (IASB) in 2001, and the IASB adopted the Framework in April 2001.

[30] The Corporate Report issued for comment on behalf of the ASSC of the ICAEW in association with the Institute of Chartered Accountants of Scotland (ICAS), the Institute of Chartered Accountants in Ireland (ICAI), the Association of Certified Accountants (ACA), the Institute of Cost and Management Accountants (ICMA), and the Chartered Institute of Public Finance and Accountancy (CIPFA).

Table 3.1: The Historical Development of Conceptual Framework for Financial Reporting

No.	Organisation	Country	year	Title of the report
1	American Institute of Certified Public Accountants (AICPA)	USA	1973	Trueblood Report
2	Accounting Standards Steering Committee (ASSC)	UK	1975	The Corporate Report
3	Financial Accounting Standard Board (FASB)	USA	1978	Statement of Financial Accounting Concepts No. 1 (SFAC 1): The Objective of Financial Reporting by Business Enterprises
4	Financial Accounting Standard Board (FASB)	USA	1980	Statement of Financial Accounting Concepts No. 2 (SFAC 2): Qualitative Characteristics of Accounting Information
5	Financial Accounting Standard Board (FASB)	USA	1985	Statement of Financial Accounting Concepts No. 6 (SFAC 6): Elements of Financial Statements
6	International Accounting Standard Committee (IASC)	International	1989	The Conceptual Framework
7	Accounting Standard Board (ASB)	UK	1999	Statement of Principles for Financial Reporting (SPFR)
8	IASB	International	2010	The Conceptual Framework for Financial Reporting 2010

Note: This table shows the eight reports that the researcher has used in discussing the conceptual framework for financial reporting and the concepts related to financial reporting.

3.3.1 The Objective of Financial Statements

The above mentioned reports are concerned with the objective of financial statements. As shown in Table 3.2 the general purpose of financial statements, as described in US, UK and international conceptual framework documents, has not really changed over time from 1973 to 2010.

Table 3.2: The Objective of Financial Statements

Trueblood Report AICPA (1973)	The Corporate Report ASSC (1975)	SFAC 1 FASB (1978)	The Conceptual Framework IASC (1989)	SPFR ASB (1999)	The Conceptual Framework IASB (2010)
Providing information useful for making economic decisions.	Communicating economic measurements of, and information about, the resources and performance of the reporting entity useful to those having reasonable rights to such information.	Providing information that is useful to present and potential investors and creditors and other users in making rational investment, credit, and similar decisions.	Providing information about the financial position, performance and changes in financial position of an entity that is useful to a wide range of users in making economic decisions.	Providing information that is useful to those for whom they are prepared.	The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit.

Note: This table shows the basic objectives of financial statements as documented in the reports.

Table 3.2 shows that all these reports note that the fundamental objective of financial statements is to provide useful information about a company to the users of financial statements. Financial information can be delivered to a wide range of users in an easily accessible way that is known as internet financial reporting (IFR). In other words, IFR is a form of financial reporting disclosure that helps to achieve the objective of financial statements. Ettredge et al. (2001) note that IFR helps in providing a common level of disclosure for all stakeholders. Campbell and Slack (2008) mention that "… the company website has become the vehicle of choice for most stakeholders seeking information on a company" (p. 8). As noted in Hodge and Pronk (2006), nearly 75% of non-professional investors use the internet for investing activities. Table 3.2 reveals that while the 1989 framework mentioned a wide range of users, the 2010 conceptual framework only mentions to existing and potential investors, lenders and other creditors. The next section thus discusses the users of financial statements.

3.3.2 Users of Financial Statements

In order to understand the rationale for financial reporting, it is important to know about the users and the uses of financial reporting for a large variety of business purposes. For instance, the financial information that investors (existing and potential investors) need is to help them make decisions about investments in organisations; in other words, buying, holding, or selling shares. In addition, financial reporting may be used to assess the stewardship of management in order to make decisions about management (IASC, 1989). Other stakeholders may use internet for financial reporting purposes; for example: suppliers, governments, and regulators. Table 3.3 summarises the users of financial statements from the view point of the above mentioned reports.

Table 3.3: Users of Financial Statements

Trueblood Report **AICPA (1973)**	**The Corporate Report** **ASSC (1975)**	**SFAC 1** **FASB (1978)**	**The Conceptual Framework** **IASC (1989)**	**SPFR** **ASB (1999)**	**The Conceptual Framework** **IASB (2010)**
Investors	Investors	Investors	Present and potential investors	Investors	Existing and potential investors
Creditors	Creditors	Creditors	Creditors	Creditors	Creditors
Employees	Employees	Employees	Employees	Employees	Employees
Customers	Customers	Customers	Customers	Customers	Customers
Government	Government		Governments and their agencies	Governments and their agencies	Governments and their agencies
		Regulatory Authorities			Regulatory bodies
	Financial analysts	Financial analysts			
	Public	Public	Public	Public	Public
		Lenders	Lenders	Lenders	Lenders
		Suppliers	Suppliers	Suppliers	Suppliers
		Others[31]			

Note: This table shows the users of financial statements.

[31] Financial Press and Reporting Agencies, Labor Unions, Trade Associations, Business Researchers, Teachers and Students, Lawyers, Management, Directors, Brokers, Underwriters, Stock Exchanges, Legislators, Economists, Taxing Authorities.

From Table 3.3 it can be seen that there are a wide variety of users of financial reports who have an interest in knowing about a company. For example, Rowbottom and Lymer (2010) explored the use and users of online corporate annual reports of large listed companies on the London Stock Exchange; they find that private individuals, employees and professional investors and creditors are the most common users of IFR. Adams and Frost (2004) mention the purpose for a company having a web site is to meet the information needs of customers, employees, community groups, government, suppliers, and non-governmental organisations. In Italy, Quagli and Riva (2009) found that 47% of lenders and 15% of analysts use IFR. Hodge and Pronk (2006) find that employees, financial analysts, private shareholders, students, institutional shareholders, business partners, journalists, customers, competitors, lenders, academics and government were the most frequent visitors to company quarterly reports.

The users of financial reporting have different needs and therefore, financial reporting possibly should have information that satisfies all users. This will not be achieved unless the financial information that is provided has specific characteristics. The next section discusses the qualitative characteristics of financial information.

3.3.3 The Qualitative Characteristics of Financial Information

Financial reports should provide information on stewardship as well as being decision-usefulness; therefore, financial information should have specific characteristics (AICPA, 1973) as summarised in Table 3.4. Two primary characteristics relating to financial information to be useful are the need to be relevant and faithfully (IASB, 2010).

Table 3.4: The Qualitative Characteristics of Financial Statements

Trueblood Report **AICPA (1973)**	**The Corporate Report** **ASSC (1975)**	**SFAC 2** **FASB (1980)**	**The Conceptual Framework** **IASC (1989)**	**SPFR** **ASB (1999)**	**The Conceptual Framework** **IASB (2010)**
Relevance	**Relevance**	**Relevance**	**Relevance**	**Relevance**	**Relevance**
Reliability	**Reliability**	**Reliability**	**Reliability**	**Reliability**	**Faithful representation***
Understandability	**Understandability**	**Understandability**	**Understandability**	Understandability	Understandability
Comparability	**Comparability**	**Comparability**	**Comparability**	Comparability	Comparability
Materiality		Materiality	Materiality	Materiality	**Materiality**
		Neutrality	Neutrality	Neutrality	
	Complete		Complete	Complete	
Consistency		Consistency		Consistency	
		Presentational	Presentational	Presentational	
		Timely			
		Faithful	Faithful	Faithful	
		Verifiability			
		Costs and benefits			
		Predicative value	Prudence	Prudence	
	Timely				Timeliness
					Verifiability

Note: This table shows the qualitative characteristics of financial statements where the bold are the fundamental characteristics of financial information. * The term faithful representation is a replacement to the term reliability which was used in SFAC 2 and the Framework (1989).

Table 3.4 shows that relevance and reliability are fundamental qualitative characteristics. Understandability and comparability are other fundamental qualitative characteristics as mentioned in four reports (AICPA, 1973; ASSC, 1975; FASB, 1980; IASC, 1989) whereas comparability, verifiability, timeliness, and understandability enhance qualitative characteristics according to IASB, 2010. The information provided by IFR is more accessible than financial information that is provided in hard copy; it enhances the qualitative characteristics of financial information regarding its timeliness.

3.3.4 The Elements of Financial Statements

The purpose of financial statements is to describe the financial effects of transactions and other events by grouping them into broad classes according to their economic characteristics (IASC, 1989).

The main elements of financial statements are assets, liabilities, equity, and income. Companies worldwide should provide information that is of sufficient importance to influence the judgment and decisions of the users; full disclosure, such as IFR, helps to do so; and is examined with respect to companies in the Arab MENA region which are the subject of this study.

3.4 Disclosure

The concept of disclosure has been viewed in many ways; for instance, Choi (1973) defines disclosure as:

> "The term of disclosure refers to the publication of any economic information relating to a business enterprise, quantitative or otherwise, which facilitates the making of investment decisions." (p. 160)

According to Hussey (1999), disclosure is defined as:

> "The provision of financial and non-financial information, on a regular basis, to those interested in the economic activities of an organisation; the information is normally given in an annual report and accounts, which includes financial statements and other financial and non-financial information; the annual report and accounts of a limited company is regulated by company legislation, accounting standards, and, in the case of quoted company, by stock exchange regulations." (p. 131)

Owusu-Ansah (1998) describes disclosure as the communication of a company's information, and it does not matter whether this information is financial or non-financial, quantitative or qualitative. Disclosure may differ from one company and can be divided into two formats: mandatory; and voluntary as Cooke (1992) notes:

> "… consisting of both voluntary and mandatory items of information provided in the financial statements, notes to the accounts, management's analysis of operations for the current and forthcoming year and any supplementary information" (p. 231)

Mandatory disclosure may be required by governments, regulators, accounting standards, or stock exchange regulations. Owusu-Ansah (1998) describes disclosure as mandatory if companies are obliged under a regulatory regime to disclose information insofar as it is applicable to them. Voluntary disclosure is information that is in excess of mandatory disclosure (Alsaeed, 2005). In this regard, Barako et al. (2006) define voluntary disclosure as "the discretionary release of financial and non-financial information through annual reports over and above the mandatory requirements" (p.7). Wallace and Naser (1995) argue that disclosing non-mandatory information is relevant to users. Alsaeed (2005) reveals that voluntary disclosure provides information to make more informed decisions because of the inadequacy of mandatory information. One such form of voluntary disclosure is financial reporting via the internet (IFR in this thesis) which is also known as a digital reporting (ICAEW, 2004). The next section discusses the internet in general before moving on to discuss IFR.

3.5 The Internet

The emergence and expansion of the internet has had a significant impact on changing communication and the timing of financial and other company information (Xiao et al., 1996; Lymer, 1999; Ashbaugh et al., 1999; Debreceny et al., 2001; Berk, 2001; Larrán and Giner, 2002; Xiao et al., 2002; Jones and Xiao, 2004; Barac, 2004; Chan and Wickramasinghe, 2006; Ghani et al., 2008). More than a decade ago Petravick and Gillett (1996) defined the internet as follow:

> "... an international collection of more than 50,000 independent communication networks that are owned by a variety of public, educational, and governmental entities" (p.26)

They note that these networks are linked to each other to create a global web-like communication system. According to Spaul in 1997, there were 60 million users in over 160 countries connected together by the internet on any given day. Lymer et al. (1999) define the internet as "a grouping of networks that interoperate under a common suite of standards" (p.1). More recently, Gibson (2008) defines the internet as "a global collection of computer networks linked together and available for your use" (p.19). It offers a new channel of undertaking commerce by extending the possibilities for the management of company information both within and between companies (Lymer, 1999). In addition, it provides a totally new reporting environment by enabling the dissemination of a very large quantity of information with low cost in a manner that does not exist in the traditional hard copy format of annual reports (Debreceny and Gray, 2001). In just a few years, the internet has consolidated itself as a platform that has changed the way that people do business, and the way that they communicate (Jones and Xiao, 2004). The internet, as no other communication medium, has given an international dimension to the world (Fordham, 1995; Wagenhofer, 2003) and has become the universal source of information for

millions of people, at home, at school, and at work (Xiao et al., 2005). With a very low investment, anyone can have a web page available on the internet (Spaul, 1997). This way, almost any business can reach a very large market, directly, quickly and economically, no matter the size or location of the business. It is relatively cheap and extremely fast in presenting useful information in varying formats. The internet offers users facilities to access documents containing multimedia mixtures of text, graphics, sound and video in a standard format available to almost everyone to access and use (Lymer and Tallberg, 1997; Spaul, 1997; Coombs, 1998). This particular technology has been successfully used for various forms of business communication, in particular for product/service marketing purposes and for corporate reporting (Ismail, 2002). There are many reasons for a company to design a web site, including commercial advertising and promotion, electronic commerce, attracting potential stakeholders, and drawing a good image for the company (Gandia, 2003). Use of the internet as a communication medium has advantages and disadvantages as summarised by Adams and Frost (2004) in Table 3.5; however, the advantages far outweigh the disadvantages.

Table 3.5: Advantages and Disadvantages of Using the Internet

Advantages
Accessible 24 hours a day.
Accessible from any networked terminal anywhere in the world.
World's largest information retrieval system.
Search engines assist users in identifying relevant documents.
Can be updated frequently providing user with timely information.
Information providers can identify how many users have visited their site and who those users are.
Information providers can identify which parts of their site are the most visited.
Data can be downloaded, cut and pasted and exported for user manipulation.
Ability to provide a search facility for individual company sites.
Allows cross-referencing through hyperlinks to, for example, prior year reports, relevant legislation/ guidelines, government agencies, NGOs, other companies, press releases.
Multimedia functions such as video, audio, graphics and 3D simulations give user and provider a variety of communication choices.
Feedback can be given through email, interactive feedback forms, discussion areas, conferencing.
Low cost form of information dissemination given size of audience.
Environmentally friendly.
Disadvantages
Not everyone can access the internet.
Resources required developing and maintaining the web site.
The information on the web can be vast and disorganised.
Much of the performance data is not audited or verified.
At present disclosure on web sites is largely unregulated.

Source: Adams and Frost (2004, p. 3).
Note: This table shows the advantages and disadvantages of using the internet as a communication medium.

The use of the internet has grown rapidly, for instance, in 2005, 14.6% of the world population had adopted internet technology as shown below in Table 3.6 and this rate increased in 2010 to 28.7% of the population globally used the internet (the Internet World Stats, 2010).

Table 3.6: World Internet Users and Population Statistics

World Regions	Internet Users 2005 (‘000)	% Pop. 2005	Internet Users 2010 (‘000)	% Pop. 2010	Population 2010 (‘000)
Africa	16,174	1.8%	110,931	10.9%	1,013,779
Asia	323,756	8.9%	825,094	21.5%	3,834,792
Europe	269,036	36.8%	475,069	58.4%	813,319
Middle East	21,770	8.3%	63,240	29.8%	212,336
North America	223,392	68.0%	266,224	77.4%	344,124
Latin America/Caribbean	68,130	12.5%	204,689	34.5%	592,556
Oceania / Australia	16,448	49.2.%	21,263	60.3%	34,700
WORLD TOTAL	**938,710**	**14.6%**	**1,966,514**	**28.7%**	**6,845,609**

Source: Internet World Stats 2005, and 2010.

Note: This table compares the internet users in two years “2005 and 2010”, showing an increase of the number of internet users throughout the world.

Table 3.6 shows that the three populations using the internet the most in 2010 were North America with 77.4% of the population; Oceania/ Australia with 60.3% of the population; and Europe with 58.4% of the population but Africa and the Middle East are much further behind. In addition, it shows that the use of the internet has increased across all world regions. For instance, the rate of using the internet in the Middle East region has increased from 8.3% to 29.8%; this shows very rapid growth and that people in this region are beginning to engage with this technology. Internet World Stats (2010) reveals that 19.5% of the population of Arab MENA countries use the internet as shown in Table 3.7. However, the use of the internet in the Middle East of 29.8% does not represent all MENA countries because not all Arab MENA countries are located in the Middle East and not all are Arab. For instance, one of the non-Arab MENA countries in the Middle East is Iran with a population of 77.9 million and 36.9 million (47.3%) internet users in 2010 (Internet World Stats, 2010). Table 3.7 shows that the overall usage of the internet in the Arab MENA countries is low when compared to the North America, Oceania/ Australia, and Europe; especially for countries such as Iraq, Mauritania, and Libya. However, it

shows that some countries have a high usage, even though they are categorised as developing countries such as Bahrain 88% and United Arab Emirates 76%.

Table 3.7: The Arab MENA Countries Population and Internet Users in 2010

No.	Country	Population ('000)	Internet Users 2010 ('000)	% Pop.
1	Algeria	34,586	4,700	14%
2	Bahrain	1,200	1,056	88%
3	Djibouti*	740	26	4%
4	Egypt	80,471	17,060	21%
5	Iraq	29,671	325	1%
6	Jordan	6,407	1,742	27%
7	Kuwait	2,789	1,100	39%
8	Lebanon	4,125	1,000	24%
9	Libya	6,461	354	5%
10	Mauritania*	3,359	151	5%
11	Morocco	31,627	10,442	33%
12	Oman	2,773	1,237	45%
13	Palestine	4,119	356	9%
14	Qatar	1,699	436	26%
15	Saudi Arabia	25,732	9,800	38%
16	Somalia*	10,085	126	1%
17	Sudan*	41,980	4,200	10%
18	Syria	22,198	3,935	18%
19	Tunisia	10,589	3,600	34%
20	United Arab Emirates	4,975	3,778	76%
21	Yemen*	23,495	420	2%
TOTAL		**349,081**	**65,844**	**19%**

Source: Updated form Internet World Stats 2010.
Note: This table shows the population and internet users in Arab MENA countries in 2010. * Not part of this thesis.

The use of the internet in Arab MENA countries differs greatly from one country to another; but in general, the internet has spread and is pervasive throughout the world including the Arab MENA countries. Nowadays, many companies in the world have set up their websites for

different purposes, one of which is the disclosure of financial reporting in a format which is known as Digital Reporting (Jones and Xiao, 2004), or IFR.

3.6 Internet Financial Reporting

In the previous sections, financial reporting, disclosure, and the internet were discussed; this section brings all of these topics together to discuss IFR, which is web sites where are used to provide financial reports for users (Lybaert, 2002; Poon et al., 2003). Web sites can be used to provide both financial and non-financial disclosure, but for most companies this is voluntary and unregulated (Kelton and Yang, 2008). However, the UK, US and other developed markets have requirements that obligate companies to place financial reports on their web sites; furthermore, the listing rules (including some Arab MENA countries) require companies to place key information on their web sites as a condition of listing (Rowbottom et al., 2005).

Ashbaugh et al. (1999) mention that a company is considered to be providing IFR when it discloses a comprehensive set of financial statements and auditor's report or when it is linked to the securities and exchange commission's electronic data gathering, analysis, and retrieval (EDGAR) system or elsewhere on the internet. However, Oyelere et al. (2003) define using IFR by a company when it provides on the web a comprehensive set of financial statements or some financial highlights from its financial statements or partial or summarised financial statements. There is a difference between the two definitions where the first definition concentrates only on the disclosure of the annual reports on the internet, the second definition generalises IFR to any form of financial information. This study considers that a company has IFR when it provides i) a comprehensive set of financial statements (containing footnotes and the auditors' report); ii) summary of financial statements; iii) financial highlights; iv) a link to a company's annual report either on a stock exchange in which the company is listed or elsewhere on the internet.

Nowadays, many companies with a web site use it to distribute their financial information in addition to using the traditional hard copy reports which are becoming increasingly untimely and of less importance to users of financial information (O'Kelly, 2000; Jensen and Xiao, 2001; Jones and Xiao, 2004; Hunter and Smith, 2009). Lymer et al. (1999) define IFR, or digital reporting as:

> "…the public reporting of operating and financial data by a business enterprise via the World Wide Web[32] or related internet-based communications medium" (p.2)

Using the internet to disseminate financial reporting has grown rapidly; and this growth as a medium for communicating company reporting information has altered the way information flows from a company to users (Gandia, 2003). Indeed, the FASB (2000) lists potential motives for companies to provide financial information on the internet which include:

> "Reducing the cost of and time to distribute information, communicating with previously unidentified consumers of information, supplementing traditional disclosure practices, increasing the amount and type of data disclosed, and improving access to potential investors for small companies" (p.1)

Ashbaugh et al. (1999) point out that companies have different incentives for having a web site and engaging in internet financial information due to the variation in the costs and the benefits when comparing IFR with traditional hard copies annual reports. Haasbroek and Toit (2003) summarise the benefits of putting up annual reports on the web site as shown in Table 3.8.

[32] The web is a set of protocols for the publishing of information and for the interpretation by a computer client of that information. For an overview of the Internet, see the web site of the Internet Society (www.isoc.org).

Table 3.8: Benefits of Online Reporting for Stakeholders and Companies

Benefits for Stakeholders		
1	Up-to-date information	The key advantage of no line communication is instant and availability of up-to-date information.
2	Timeliness	All information can be received once it is published.
3	Free information in greater volumes	Users of company information can search and download all data they need in standard time at no charge.
4	Information to support decision	Investors require relevant information to make informed risk assessment and investment decisions; and all this information is provided on a company web site.
5	Depth and context	Information can be accessed according to the depth, and level of detail that investors need.
6	Access on demand	Information on a company web site is available 24-hour.
7	Unfiltered information	Investors prefer to receive information from the main source not via intermediaries; and this can be achieved via a company web site.
8	Historical information	In addition to up-to-date information, some companies offer an archive on their web site by which stakeholder can check historical information and use it to analyse the progress of the company.
9	Personalisation and customisation	Customised email allows investors to receive alerts and information of interest.
10	Global reach	The company's web site can be reached by international global audience.
Benefits for companies		
1	Effective communication	The internet is mass communications; and the web is an effective way to communicate with potential investors and shareholders. In addition, companies can get feedback for their stakeholders via their web sites.
2	Site monitoring	Companies with web sites may monitor users of their information when they check the companies' web sites. Companies may indicate how many people have accessed, what information these users usually need.
3	Global audience	Companies are increasingly seeking markets beyond their borders.
4	Interactivity	By having a web site, a company can ensure maximum attention from online investors and be in a position to expand the business by making an interactive.
5	Limitless space available	A company may add unlimited information on its web site to explain its performance.

Source: Adopted from Haasbroek and Toit (2003).
Note: This table shows the benefits of online reporting for both stakeholders and companies.

IFR or Digital reporting can bring benefits for a number of users (ICAEW, 2004) such as low cost, wider reach, frequency and speed (Debreceny et al., 2002). The use of the internet to present financial information (or IFR) differs between two generations, discussed in the following sections as first-generation internet financial reporting and second-generation internet financial reporting.

3.6.1 First-Generation Internet Financial Reporting

First-generation IFR reporting is described as being:

> "Level 1 [first-generation] is simply a means of publishing and disseminating reports more widely and more efficiently but in essentially the same formats as at present using portable document format (PDF) for example" (ICAEW, 2004; p.7).

In building web sites, Hyper Text Mark-up Language (HTML) is the most popular format. However, for the purposes of reporting financial information, Portable Document Format (PDF) and HTML are the most popular formats (Allam and Lymer, 2003; Lymer and Debreceny, 2003). PDF and HTML formats are examples of first-generation IFR. According to Beattie and Pratt (2001), HTML is defined as: "… a set of structural and semantic tags to describe how elements are to appear on a page" (p.9). It is used for formatting and structuring data in a document and explaining the meaning of the data to the computer. PDF is a special file format, developed by the Adobe Corporation, for creating documents that can look and print exactly like the original hardcopy document. To view a PDF file, users require an Adobe Acrobat PDF Reader plug-in to be installed on their computer (FASB, 2000). Each format has its own advantages and disadvantages as listed below in Table 3.9, as summarised by FASB (2000).

Table 3.9: Relative Advantages and Disadvantages of HTML and PDF

	Advantages	Disadvantages
HTML	Can be viewed directly in the browser-requires no plug-in.	Browser may split tables and pages.
	Is an open formatting standard.	Document printed from browser will probably not look like original document.
	Can easily hyperlink into and out of HTML pages.	Can require significant work to convert original document to HTML document in terms of layout and design.
PDF	When the file is printed, it will look exactly like printed the document on which it was based.	Even though it prints well, because of differences in the aspect ratios of the screen versus printed page, it is difficult to read and navigate through PDF files on screen.
	Very easy to create from the original document.	Requires Adobe Acrobat Reader plug-in that the user must locate, download, and install.
	Document cannot be inadvertently altered by users.	Can hyperlink out of PDF files, but cannot hyperlink into specific points inside a PDF file.
		Consists of very large files that are slow to download.
		Information in PDF files is not indexed by search engines (for example, Alta Vista, Lycos, or Google).
		Plug-ins can be a security risk, since they execute automatically when user selects PDF file.
		Reader is based on a proprietary format.
		Reader is currently free, but may not be free forever.

Source: Updated from (FASB, 2000, p. 22).
Note: This table shows advantages and disadvantages of two relative formats (HTML and PDF).

However, despite the large number of disadvantages of PDF over time, the proportion of companies using HTML has declined in favour of Acrobat PDF files (Lymer and Debreceny, 2003). For instance, Geerings et al. (2003) found that PDF is the most used format in IFR disclosure; they found 94% in France, 94% in Netherlands, and 88% in Belgium. Marston and

Polei (2004) reveal that 88% of German companies use PDF format for disclosing annual reports while only 22% use HTML. In Arab MENA countries, Mohamed and Oyelere (2008) revealed that 93% of Bahraini companies use the PDF format for posting their financial information on the internet; and only 7% use HTML format. Another study, conducted in Oman by Mohamed et al. (2009) report that 58% of Omani companies that have IFR used PDF format; and only 35% used HTML format. In a comparative study between Bahrain and Oman, Mohamed (2010) found that 88% of Bahraini companies and 58% of Omani companies provided their financial information in PDF format. Thus, preparers of corporate reports prefer uploading their corporate reports using PDF since the appearance of the document is similar to the traditional hard copy (Ghani et al., 2009). More recently, however, there is second-generation internet financial reporting.

3.6.2 Second-Generation Internet Financial Reporting

Second-generation IFR is described as:

> "A means of making the underlying information available in a more effective form for analysis and interoperability with other systems, through standardisation of the framework within which the information is stored, processed and presented for reporting purposes" (ICAEW, 2004, p.6).

Items of information in second-generation IFR are tagged at a level of detail that allows manipulation of the data for a variety of purposes (Premuroso and Bhattacharya, 2008). ICAEW (2004) reveals that in second generation IFR, the most important format is eXtensible Business Reporting Language (XBRL) which is used to format and structure the data in a document and provides an explanation of the meaning of the data. It is a member of the mark-up language

family, which includes HTML. Dull et al. (2003) define XBRL as "… an XML[33]-based financial reporting language used to assist in the migration of traditional accounting information to the World Wide Web" (p.186). The XBRL format was known as eXtensible Financial Reporting Mark-up Language (XFRML), which later was changed to XBRL. That change was made because companies were disseminating not only financial information, but also other types of information (Wu and Vasarhelyi, 2004). The development of XBRL (See Appendix 3.1) and its take-up has been slow (Dunne et al., 2009; Dunne et al., 2013). Hence, this thesis does not look at XBRL of second generation IFR, as it is almost non-existent in Arab MENA countries.

IFR has three main formats to disseminate financial information: PDF, HTML (first generation) and XBRL (second generation). Rowbottom et al. (2005) indicate that "users favor viewing financial reporting information in a PDF format" (p.47). Furthermore, there is a lack of demand for financial reporting in a HTML format (Rowbottom and Lymer, 2009). Dunne et al. (2009) reveal that there was little awareness of XBRL among stakeholder groups and that half of the business practitioners used PDF format whereas very few adopted HTML and none of them used XBRL. Ghani et al. (2009) examined users' perceptions in New Zealand of the three IFR formats; PDF, HTML and XBRL. They found a significant proportion of their 62 New Zealand public accountants were familiar with PDF (83%) compared with 51% HTML, and only 8% for XBRL. Reasons for preferring a particular format from the point views of the participants in Ghani et al.'s (2009) study are summarised in Table 3.10.

[33] XML: eXtensible Mark-up Language.

Table 3.10: Reasons for Preferring Different Formats

XBRL	HTML	PDF
• The ability to be used as an analytical tool. • Increases understandability since the information required could be viewed at the time it is required. For example, an information item in the financial statements and footnotes can be viewed simultaneously. • It allows greater manipulation of data into various categories. • Helps to update figures automatically without the need to do extensive manipulations. • It has the ability to standardize results. • Reduces effort.	• Easier to navigate and more user friendly for viewing the information. • The participants prefer the way it links to the basis of the information. • Increases the understandability of information, although may need to enter the data into Excel spreadsheet. • Easier to drill down into numbers	• Format which participants were most familiar with. • Resistant to change. • Ability to read the whole content of corporate reports rather than relying solely on the numbers. • Easier to obtain software to download a PDF document and most users would have the software to download it. • No technical competencies required for manipulating data online. • Easier to use, clear, concise, understandable and reliable.

Source: Ghani et al. (2009).
Note: This table shows a brief summary of the reasons why participants prefer a particular digital reporting format.

The earlier studies of Internet Financial Reporting (IFR) in the late 1990's just investigated the existence of web sites and whether or not there was financial information disclosure via the internet to the users of financial information (see for example: Petravick and Gillett, 1996; Gary and Debreceny, 1997; Lymer, 1997; Barac, 2004). Some of these studies were conducted by professional accounting bodies, such as the IASC (1999), the FASB (2000), and the ICAEW (2004). Some were single-country studies as shown in Appendix 3.2, and others were multi-country studies as in Appendix 3.3. Following this, studies then examined the association between IFR and possible explanatory factors that influenced the disclosure of IFR. The results of the earlier studies revealed that companies in developed countries tended to disseminate

financial information via their web sites more than in developing countries. Disseminating financial information has increased dramatically though; for instance, Petravick (1999) examined two samples of Fortune 150 companies in USA in 1996 and 1997; the results revealed that in 1996 only 33% of the sample had web sites and only 27% presented financial information; by 1997, this rate had increased to 95% of the sample with web sites and 93% disseminated financial information. In the UK, Craven and Marston (1999) investigated the 206 largest companies listed on the London Stock Exchange; they found that 74% of the sample had web sites and 71% provided financial information. The FASB's study in 2000 showed that 99% of the sample (Fortune 100 U.S.A companies) had web sites and 94% posted financial information. In developing countries, Xiao et al. (2004) investigated IFR in China by the largest 300 companies found that 68% of the companies in the sample had web sites of which 71% presented financial information. In Greece, Despina and Demetrios (2009) examined IFR by 302 companies listed on the Athens Stock Exchange and every one had a web site and presented some sort of financial information. In contrast, in Turkey, Bozcuk et al. (2009) reported that 88% of their sample (500 companies listed in 2007) had web sites; however, they revealed that only 9% presented financial information. Another example from a developing country is Nigeria in 2009 when Salawu investigated IFR by 220 companies listed on the Nigeria Stock Exchange; the results revealed that 54% of the companies in the sample had web sites but only 14% of them posted financial information.

The results of the above studies indicate the growing use of the internet for companies by disseminating information, including financial information (annual reports, financial statements, and financial summaries) on the internet, but they show that the extent and development of IFR practices across countries are different specifically in developing countries, where some countries have a high level of IFR such as in South Africa (see Barac, 2004) and Thailand (see

Davey and Homkajohn, 2004), and others have a low level of IFR such as in Bangladesh (see Dutta and Bose, 2007) and Croatia (see Pervan, 2009). This study, thus, tries to determine the extent of IFR in Arab MENA developing countries as this could be very different across the region. The next section reviews prior evidence focusing on IFR in Arab MENA countries.

3.7 Previous Studies on IFR in Arab MENA Countries

There is little empirical evidence to date in Arab MENA countries about IFR, for example, to the best of the researcher's knowledge, there are no previous studies in Arab MENA countries at all in the 1990's. Table 3.11 summaries the results of the seventeen studies conducted in Arab MENA countries from 2002-2012.

Table 3.11: Studies that Examine IFR in Arab MENA Countries

No	Author	Year	Country	Sample	Sample scope	%W. S.	%F.I.
1	Ismail	2002	Qatar	24	Listed companies	79	21
			Bahrain	36		53	47
			Saudi Arabia	68		59	41
2	Joshi and Al-Modhaki	2003	Kuwait	42	Selected listed companies	48	50
			Bahrain	33		49	81
3	Momany and Al-Shorman	2006	Jordan	60	Listed on the first market of the Amman Stock Exchange	45	70
4	Al-Shammari	2007	Kuwait	143	Listed on the Kuwait Stock Exchange	77	70
5	Ezat	2008	Egypt	432	The entire companies listed on Egyptian Stock Ex.	52	36
6	Mohamed and Oyelere	2008	Bahrain	49	Listed on the Bahrain Stock Ex.	82	68
7	Al-Motrafi	2008	Saudi Arabia	113	Joint Stock Companies included 73% list on Saudi Stock Market	84	54

8	Mohamed et al.	2009	Oman	142	Listed on the Muscat Stock Market	59	37
9	Al-Moghaiwli	2009	Qatar	43	Listed on the Doha Securities Market	91	72
10	Desoky and Mousa	2009	Bahrain	40	Listed on the Bahrain Stock Ex.	85	91
11	Al-Hayale	2010	Jordan	20	Industrial companies listed in the Amman Stock Exchange	55	30
12	Aly et al.	2010	Egypt	98	The most actively traded listed on the Egyptian Stock Market	69	56
13	Mohamed	2010	Oman	142	Listed on the Muscat Securities	59	37
			Bahrain	51	Listed on Bahrain Stock Exchange	78	80
14	Oyelere and Kuruppr	2012	U.A.E	132	Listed on the Abu Dhabi Securities and the Dubai financial Market	87	68
15	AbuGhazaleh et al.	2012	Jordan	187	Actively traded companies from the Jordanian listed companies	56	76
16	Hossain et al.	2012	Qatar	42	Qatar listed companies	98	71
17	Momany and Pillai	2012	UAE	65	Listed on Abu Dhabi Security Exchange	89	60

Note: This table shows a brief summary of the studies were conducted in Arab MENA countries. %W.S= percentage of companies with web sites; %F.I= percentage of companies with web sites and disseminate financial information.

Table 3.11 shows that most of the studies were undertaken in the Gulf Co-operation Council (GCC) countries, which are part of Arab MENA countries, and a few studies, were undertaken in Egypt and Jordan. To the best of the researcher's knowledge, there is no evidence about IFR studies in Algeria, Iraq, Lebanon, Libya, Morocco, Palestine, Syria, and Tunisia; hence contributing to our knowledge. Some of the studies undertaken investigated only the level of

IFR (see Ezat, 2008; Mohamed and Oyelere, 2008; Almghaiwli, 2009; Desoky and Mouse, 2009; Al-Hayale, 2010; Mohamed, 2010); and others examine factors that may affect IFR, which will be discussed in more detail in the next section (see Ismail, 2002; Hadi, 2005; AlShammari, 2007; Al-Motrafi, 2008; Alanezi, 2009; Al-Moghaiwli, 2009; Aly et al., 2010; Oyelere and Kuruppr, 2010; AbuGazaleh et al., 2012).

Table 3.11 also shows that there are differences in the level of IFR among Arab MENA countries; for instance, Egypt, Jordan, and Oman have a low level of IFR compared to Bahrain, Qatar, Saudi Arabia, and U.A.E, which have a high level of IFR. On the other hand, the size of the samples in the above mentioned studies are small except Ezat's study on Egypt, which included 432 companies in its sample. The table also shows that most of the studies examine IFR in a single-country; three studies compare IFR between two and/ or three countries. The current study includes all listed companies in Arab MENA countries and compares IFR across the whole of the Arab MENA countries thus contributing extensively to our knowledge. The next section discusses selected factors that influence companies to adopt IFR.

3.8 Factors Affecting Voluntary Disclosure and IFR

Research into IFR has recently focused on determining the factors that affect IFR by companies such as: company size; industrial sector; and leverage (see Pirchegger and Wagenhofer, 1999; Oyelere et al., 2003; Xiao el al., 2004; Almilia, 2009). The second part of this thesis examines the factors that may affect the voluntary disclosure of IFR in Arab MENA countries. This adopts an institutional theory perspective as discussed in Chapter 4 and relates them to this study in Chapter 7. Many potential determinants of IFR disclosure have been examined in previous studies; Oyelere et al. (2003) found that company size, type of auditor, listing status, profitability, leverage, and industry are the most frequently identified factors. This study follows

Oyelere et al.'s (2003) study, but in addition adds the country factor as few previous studies have investigated this factor; and this study is one of a few studies that examines the effect of country on IFR; hence contributing to our knowledge. However, listing status will not be investigated as all the companies in the Arab MENA countries in this study are listed on their local stock markets. Hence, this chapter discusses the factors explored later in this study which are: company size; profitability; leverage; industrial sector; type of auditor; country; and region. These factors were included because of the following reasons: i) these factors were used by large number of previous studies and results can be compared to the literature; ii) previous studies employed different theories for interpreting the relationship between IFR and factors affect the adoption of IFR; this study looks at these factors as institutional factors; iii) data availability; and iv) the ability to be measured easily for the purpose of statistical analysis.

The next sections discuss these factors in turn by discussing the measures and the findings of prior studies.

3.8.1 Company Size

Many studies about IFR practices examine whether or not there is a relationship between the size of a company and the voluntary disclosure via the internet (Craven and Marston, 1999; Pirchegger and Wagenhofer, 1999; Ashbaugh et al., 1999; Brennan and Hourigan, 1999; Ettredge et al., 2002; Larrán and Giner, 2002; Debreceny et al., 2002; Ismail, 2002; Bonsón and Escobar, 2002; Allam and Lymer, 2003; Marston, 2003; Oyelere et al., 2003; Geerings et al., 2003; Rodrigues and Menazes, 2003; Joshi and Al-Modhaki, 2003; Xiao et al., 2004; Marston and Polei, 2004; Mendes-da-Silva and Christensen, 2004; Hadi, 2005; Bollen et al., 2006; Prabowo, 2006; Bonsón and Escobar, 2006; Barako et al., 2006; Chan and Wickramasinghe, 2006; Pervan, 2006; Momany and Al-Shorman, 2006; Andrikpoulos and Diakidis, 2007; Al-

Shammari, 2007; Barako et al., 2008; Al-Motrafi, 2008; Almilia, 2009; Despina and Demetrios, 2009; Alanezi, 2009; Al-Mghaiwli, 2009; Alarussi et al., 2009; Fekete et al., 2009; Desoky and Mousa, 2009; Aly et al., 2010; Oyelere and Kuruppr, 2010; Elsayed, 2010; Homayoun and Abdul Rahman, 2010; Agboola and Salawu, 2012; Agyei-Mensah, 2012; Alali and Romero, 2012; Boubaker et al., 2012; AbuGhazaleh et al., 2012; Turrent and Ariza, 2012; Uyar, 2012; Momany and Pillai, 2012; Hossain et al., 2012); hence this thesis follows this tradition by including company size as a factor.

Size is measured in various ways in different studies, including market capitalisation, total assets, number of employees, and sales (Abdelsalam et al., 2007) but there is no specific theoretical reason for choosing one rather than another (Marston, 2003). However, total assets and market capitalisation have been used in most previous studies (such as the 51 studies discussed in this thesis). Table 3.12 summarises the frequencies of different measures of size used in previous studies.

Table 3.12: Previous Studies' Measures of Company Size

Tool of Measurement	Number of studies[34]	Percentage
Total assets	25	49%
Market capitalisation	24	47%
Sales	7	14%
Turnover	5	10%
Number of employees	4	8%
Capital employed	1	2%

Note: This table shows the various ways used in different studies to measure company size.

Table 3.12 shows that total assets (49%) and market capitalisation (47%) are the most used measures of company size used in previous studies; only a few studies (14% or less) use other

[34.] Some studies have used more than one measurement; and thus were counted more than once which increases the total number shown on the column of the number of studies to 66 studies while in fact they are only 51 studies.

measures. The findings of previous studies (such as the 51 studies discussed in this chapter) are summarised in Table 3.13.

Table 3.13: Previous Studies' Findings of Company Size Factor

Result	Number of studies	Percentage
Positive association	40	78%
Negative association	1	2%
No association	5	10%
Mixed results	5	10%
Total	51	100%

Note: this table summarises results of previous studies that included company size factor.

Table 3.13 shows that the majority of these studies (78%) suggest that company size is significantly and positively associated with voluntary disclosure of IFR; of the 51 studies that cover size (See Appendix 3.4 for more details), 40 studies find a positive relationship (Craven and Marston, 1999; Ashbaugh et al., 1999; Pirchegger and Wagenhofer, 1999; Brennan and Hourigan, 1999; Ettredge et al., 2002; Larrán and Giner, 2002; Debreceny et al., 2002; Bonsón and Escobar, 2002; Oyelere et al., 2003; Geerings et al., 2003; Joshi and Al-Modhaki, 2003; Xiao et al., 2004; Marston and Polei, 2004; mendes-da-Silvia and Christensen, 2004; Bollen et al., 2006; Prabowo, 2006; Celik et al., 2006; Bonsón and Escobar, 2006; Barako et al., 2006; Chan and Wickramasinghe, 2006; Momany and Al-Shorman, 2006; Andrikopoulos and Diakidis, 2007; Al-Shammari, 2007; Barako et al., 2008; Al-Motrafi, 2008; Almilia, 2009; Despina and Demetrios, 2009; Alanezi, 2009; Al-Moghaiwli, 2009; Alarussi et al., 2009; Desoky and Mousa, 2009; Oyelere and Kuruppr, 2010; Elsayed, 2010; Agboola and Salawu, 2012; Alali and Romero, 2012; Boubaker et al., 2012; AbuGhazaleh et al., 2012; Uyar, 2012; Momany and Pillai, 2012; Hossain et al., 2012). Only one study in Kuwait (Hadi, 2005) finds a negative association between company size (measured by sales) and IFR; one possible reason that may explain this result is the sample which included only 17 selected industrial companies

in Kuwait. The table also shows that five studies find no relationship between company size and IFR (Allam and Lymer, 2003; Aly et al., 2010; Homayoun and Abdul Rahman, 2010; Agyei-Mensah, 2012; Turrent and Ariza, 2012). Allam and Lymer (2003) used market capitalisation as the proxy of size; one reason that possibly explains their finding that all the 250 companies in their sample are the largest companies from five countries; in other words, these companies may be equal in size. They also compared their study to the study of Debreceny et al. (2002) that found a positive relationship between company size and IFR; and noted that their data was almost three years later than Debreceny et al.'s (2002) study. Aly et al. (2010) examined Egypt, which is one of the few Arab MENA country studies, and find no relationship between company size (measured by total assets) and IFR, but they do not mention why their results are unusual. The findings of Homayoun and Abdul Rahman's (2010) study reveals that size (measured by total assets) is not supported either; but their sample included top public listed companies in Malaysia based on market capitalisation. In Ghana, Agyei-Mensah (2012) also finds no association between size and IFR; but the number of companies in the sample (35 companies) was small. Other studies also have mixed results (Ismail, 2002; Marston, 2003; Rodrigues and Menezes, 2003; Pervan, 2006; Fekete et al., 2009); for instance, Pervan (2006) reports that whereas size affected IFR in Croatia, in Slovenia there is no relationship.

In Arab MENA countries, unlike Aly et al. (2010) who find no relationship between company size and IFR in Egypt; Hadi (2005) finds a negative relationship in Kuwait; and Ismail (2002) in Qatar, Bahrain, and Saudi finds a positive relationship, using turnover, but not using total assets. Other studies in Arab MENA countries (see Joshi and Al-Modhaki, 2003; Momany and Al-Shorman, 2006; Al-Shammari, 2007; Al-Motrafi, 2008; Alanezi, 2009; Al-Moghaiwli, 2009; Desoky and Mousa, 2009; Oyelere and Kuruppr, 2010; Elsayed, 2010; AbuGhazaleh et al., 2012;

Momany and Pillai, 2012; Hossain et al., 2012) reveal that company size affects IFR whereby large companies are more likely to adopt IFR. This thesis hypothesises that there will be a positive relationship between company size and IFR; it employs both total assets and market capitalization as proxies for size in measuring this relationship, as will be discussed in Chapter 7. The next section discusses the second factor in this study –profitability- that may explain why some listed companies in Arab MENA countries adopt IFR whereas others do not adopt it.

3.8.2 Profitability

Variability in IFR disclosure can be explained, to some extent, by differences in the profitability between companies. Managers in profitable companies may be motivated to disclose more information to enhance their reputation and increase their remuneration (Singhvi and Desai, 1971). Return on assets (ROA which is net profit divided by total assets) and return on equity (ROE which is net profit divided by equity) are the most common measures of profitability in previous studies. However, other measures used as a proxy of profitability are annual returns, return on sales (ROS), net income, and earnings per share (EPS). Table 3.14 summarises 38 studies that are discussed in this chapter that examine the relationship between company profitability and IFR.

Table 3.14: Previous Studies' Measures of Company Profits

Tool of Measurement	Number of studies[35]	Percentage
ROA	22	58%
ROE	17	45%
EPS	3	8%
Net income	2	5%
ROS	1	3%
Annual returns and earnings	1	3%
Pre-tax profit	1	3%
Pre-tax profit divided by capital employed	1	3%
Earnings before interest and tax over total assets	1	3%

Note: This table shows various means that were used in different studies to measure the profitability.

Table 3.14 shows that ROA (58%) and ROE (45%) are the most used measures in previous studies to assess the relationship between profitability and IFR; the table also shows that only a few number of studies have used other measures (8% or less). The findings of these studies are mixed, however, the number of studies that find no relationship far outweigh the number of studies that find a positive relationship as shown in Table 3.15.

Table 3.15: Previous Studies' Findings of Company Profitability Factor

Result	Number of studies	Percentage
Positive association	7	18%
Negative association	1	3%
No association	24	63%
Mixed results	6	16%
Total	38	100%

Note: this table summarises results of previous studies that included profitability factor.

Table 3.15 shows that of the 38 studies (see Appendix 3.5), 24 studies find no relationship between company profitability and IFR (Ashbaugh et al., 1999; Ettredge et al., 2002; Larrán and Giner, 2002; Marston, 2003; Oyelere et al., 2003; Joshi and Al-Modhaki, 2003; Marston and

[35] Some studies have more than one measure.

Polei, 2004; Mendes-da-Silva and Chistensen, 2004; Bollen et al., 2006; Momany and Al-Shorman, 2006; Chan and Wickramasinghe, 2006; Barako et al., 2006; Andrikopoulos and Diakidis, 2007; Al-Shammari, 2007; Barako et al., 2008, Al-Motrafi, 2008; Alanezi, 2009; Alarussi et al., 2009; Desoky and Mousa, 2009; Elsayed, 2010; Agboola and Salawu, 2012; Alali and Romero, 2012; Boubaker et al., 2012); a few studies find a positive relationship between profitability and IFR (Hadi, 2005; Prabowo, 2006; Celik et al., 2006; Al-Moghaiwli, 2009; Fekete et al., 2009; Aly et al., 2010; Agyei-Mensah, 2012; Hossain et al., 2012). Moreover, only one study, in China, (Xiao et al., 2004) finds a negative association between profitability and IFR using logit regression but finds no relationship using Ordinary Least Squares (OLS); they note that this may be because of a lack of emphasis on performance-based management incentives in Chinese business companies or because of extensive earnings management in China.

Among the above mentioned studies, Almilia (2009) examined IFR in Indonesia; and found a positive relationship with ROE but no relationship with ROA. The results of Almilia's study may explain the mixed results of previous studies, whereby using different measures may give different results, or it may be because of the country itself.

Regarding Arab MENA countries, of the 38 studies, 13 studies were conducted in Arab MENA countries; the majority of these studies employed ROA and ROE as proxies for profitability and found mixed results. For instance, four studies were conducted in Kuwait; three of these find no relationship between profitability and IFR (Joshi and Al-Modhaki, 2003; Al-Shammari, 2007; Alanezi, 2009); only Hadi (2005) finds a positive relationship between profitability and IFR in Kuwait; Hadi (2005) used net income in measuring profitability and the sample included only 17 industrial companies whereas the other three studies used ROA and ROE in measuring

profitability and the samples included all listed companies in Kuwaiti stock exchange. Moreover, two studies were conducted in Egypt and find different results; Aly et al. (2010) find a positive relationship using ROE whereas Elsayed (2010) finds no relationship using ROE; however, samples of both studies are different; Elsayed (2010) included all listed companies in Egypt, Aly et al. (2010) included the most actively traded companies. In UAE, Momany and Pillai (2012) investigated the relationship between profitability and IFR using two criteria as proxies (ROA and EPS) and find that EPS is positively and significantly associated with IFR; however, ROA is negatively and significantly associated with IFR. The researchers interpreted this relationship between ROA and IFR by two reasons as follow:

> "…this negativity can be explained in the context of management's decision to not reveal the positive returns and favourable liquidity position forecasting a surge in demand of dividends from the stakeholder. Fear of potential entrants into the similar industry due to high returns can also be a factor dissuading the companies from reporting their financial results. The other side of the coin is that when the liquidity position or ROA is low, this will prompt the companies to disclose their results in order to make the request for additional funds genuine and to avert potential failures which can be detrimental to the stakeholders in future. The high significance in ROA as a determinant for IFR can be attributed to the reasons mentioned above." (Momany and Pillai, 2012; p. 15)

In Qatar, Al-Moghaiwli (2009) finds that profitability (using ROA) is significantly and positively associated with IFR; however, Hossain et al. (2102) used ROE as a proxy of profitability and find it not to be associated with IFR.

This thesis follows the previous studies and employs both ROA and ROE as two proxies for profitability but without predicting the sign for the relationship between profitability and IFR. The next section discusses leverage as a variable that may affect IFR in Arab MENA countries.

3.8.3 Leverage

Leverage is another factor that may affect IFR (see for example Brennan and Hourigan, 1999; Xiao et al., 2004; Al-Shammari, 2007; Oyelere and Kuruppr, 2010; Boubaker et al., 2012). Leverage can be measured by debt to equity ratio or debt to total assets; for instance, Oyelere et al. (2003) represent leverage by debt to equity ratio (total debt/ shareholder equity). Table 3.16 summarises the different ways used in previous studies (32 studies are discussed in this thesis) that examine the relationship between company leverage and IFR.

Table 3.16: Previous Studies' Measures of Company Leverage

Tool of Measurement	Number of studies	Percentage
Total debt to equity ratio	12	38%
Total debt to total assets ratio	12	38%
Long term debt to equity ratio	4	13%
Long term debt to total assets ratio	2	6%
Book value of non-equity liabilities to book value of total assets	1	3%

Note: This table shows various means that were used in different studies to measure the leverage.

Table 3.16 shows that total debt to total assets (38%) and total debt to equity (38%) are the most measures of leverage used in previous studies. The table also shows that a few previous studies used long-term debt instead of total debt. The findings of previous studies mention that the relationship between leverage and IFR is unclear as the number of studies that find no relationship far outweigh the number of studies that find a positive relationship as shown in Table 3.17.

Table 3.17: Previous Studies' Findings of Leverage Factor

Result	Number of studies	Percentage
Positive association	8	25%
Negative association	2	6%
No association	22	69%
Mixed results	0	0%
Total	32	100%

Note: this table summarises results of previous studies that included leverage factor.

Table 3.17 shows that more than half (see Appendix 3.6 for more details) of previous studies that were reviewed in this thesis provide evidence that leverage is not a good explanatory factor for IFR (Brennan and Hourigan, 1999; Debreceny et al., 2002; Larrán and Giner, 2002; Oyelere et al., 2003; Xiao et al., 2004; Mendes-da-Silva and Christensen, 2004; Bollen et al., 2006; Celik et al., 2006; Chan and Wickramasinghe, 2006; Andrikopoulos and Diakidis, 2007; Al-Shammari, 2007; Barako et al., 2008; Alanezi, 2009; Almilia, 2009; Alarussi et al., 2009; Aly et al., 2010; Homayoun and Abdul Rahman, 2010; Alarussi et al., 2011; Agboola and Salawu, 2012; Alali and Romero, 2012; Boubaker et al., 2012; Turrent and Ariza, 2012); and eight studies find a positive relationship (with different levels of significance) between leverage and IFR (Ismail, 2002; Joshi and Al-Modhaki, 2003; Prabowo, 2006; Momany and Al-Shorman, 2006; Barako et al., 2006; Oyelere and Kuruppr, 2010; Elsayed, 2010; Momany and Pillai, 2012). In addition, two studies find a negative association between leverage and IFR (Fekete et al., 2009; Agyei-Mensah, 2012).

Nine of the above mentioned studies are in Arab MENA countries and of these nine, six find a positive relationship between leverage and IFR (Ismail, 2002; Joshi and Al-Modhaki, 2003; Momany and Shorman, 2006; Oyelere and Kuruppr, 2010; Elsayed, 2010; Momany and Pillai, 2012); and two studies find no association between leverage and IFR (Al-Shammari, 2007; Aly et al., 2010). In Kuwait, both Al-Shammari (2007) and Alanezi (2009) used total debt to equity

ratio and both studies find no relationship between leverage and IFR. In Egypt, both Aly et al. (2010) and Elsayed (2010) used total debt to total assets but findings of these studies are different; Aly et al. (2010) find no association between leverage and IFR whereas Elsayed (2010) finds a significant, positive relationship between leverage and IFR. Differences in findings of these studies may due to different samples; Aly et al.'s (2010) sample included only the most traded listed companies whereas Elsayed's (2010) study included all the listed companies. In the UAE, Oyelere and Kuruppr (2010) employed total debt to equity ratio and find a significant, positive relationship (at 1% level) between leverage and IFR; similarly, Momany and Pillai (2012) employed total debt to total assets ratio and find a significant, positive relationship (at level 10%) between leverage and IFR. Momany and Shorman (2006) also investigated this relationship on selected companies listed on Amman Stock Exchange; and find a positive association. The other two studies in Arab MENA countries that examined the effect of leverage on IFR are Ismail (2002) and Joshi and Al-Modhaki (2003). Ismail (2002) investigated listed companies on Qatar, Bahrain, and Saudi Arabia using long term debt to equity; and finds an associated relationship. Similarly, Joshi and Al-Modhaki (2003) investigated listed companies in Kuwait and Bahrain using the same measure (long term debt to equity ratio) and find an associated relationship between leverage and IFR.

This study follows previous studies by examining the relationship between leverage and IFR as this seems to be significant in Arab MENA countries studies; and assumes to find a positive relationship between IFR and leverage. The current thesis employs total debt to total equity ratio as the proxy. The next section covers previous studies that have investigated the relationship between industrial sector and IFR.

3.8.4 Industrial Sector

Lopes and Rodrigues (2007) argue that companies within the same industrial sector follow the same disclosure practices. In this context, Srivastava et al. (2009) argue that companies tend to imitate others, especially those in the same industry (DiMaggio and Powell, 1983); and particularly, those which are considered to be successful companies. In prior studies, the number of sectors differs; and the findings are mixed as shown in Table 3.18.

Table 3.18: Previous Studies' Findings on Industrial Sector Factor

Result	Number of studies	Percentage
Positive association	16	47%
Negative association	0	0%
No association	16	47%
Mixed results	2	6%
Total	34	100%

Note: this table summarises results of previous studies that included leverage factor.

Of the 34 studies discussed in this thesis (see Appendix 3.7 for more details), 47% find no relationship between industrial sector and IFR (Ashbaugh et al., 1999; Craven and Marston, 1999; Larrán and Giner, 2002; Geerings et al., 2003; Rodrigues and Menezes, 2003; Bollen et al., 2006; Momany and Al-Shorman, 2006; Chan and Wickramasinghe, 2006; Al-Motrafi, 2008; Despina and Demetrios, 2009; Fekete et al., 2009; Desoky and Mousa, 2009; Oyelere and Kuruppr, 2010; Homayoun and Abdul Rahman, 2010; Turrent and Ariza, 2012; Uyar, 2012); 47% find a positive relationship between industrial sector and IFR (Brennan and Hourigan, 1999; Bonsón and Escobar, 2002; Debreceny et al., 2002; Ismail, 2002; Oyelere et al., 2003; Joshi and Al-Modhaki, 2003; Xiao et al., 2004; Bonsón and Escobar, 2006; Celik et al., 2006; Barako et al., 2006; Al-Shammari, 2007; Alanezi, 2009; Aly et al., 2010; Elsayed, 2010; Alali and Romero, 2012; Boubaker et al,. 2012); and 6% find mixed results (Marston, 2003; Pervan,

2006). Marston (2003) investigated the effect of industrial sector on companies with web sites and IFR; she found a positive relationship between industrial sector and companies that had a web site but not with companies that disseminated financial reporting via their web sites. Pervan (2006) found that whereas Croatia had a positive and significant relationship between company industrial sector and IFR, Slovenia had no relationship.

The above mentioned studies provide no clear evidence as to whether industrial sector affects IFR. These studies cover a period from 1999 to 2012 and the differences in the results do not appear to be time variant. In addition, these differences are not due to being in developed or developing countries.

Of the above mentioned studies, ten studies examined Arab MENA countries; six studies find a positive relationship between industrial sector and IFR (Ismail, 2002; Joshi and Al-Modhaki, 2003; Al-Shammari, 2007; Alanezi, 2009; Aly et al., 2010; Elsayed, 2010); whereas four studies find no association between industrial sector and IFR (Momany and Al-Shorman, 2006; Al-Motrafi, 2008; Desoky and Mousa, 2009; Oyelere and Kuruppr, 2010). In Egypt, Aly et al. (2010) and Elsayed (2010) find industrial sector is positively associated with IFR (at 1% level). In Kuwait, Al-Shammari (2007) and Alanezi (2009) find that industrial sector is significantly (positive at level 1%) associated with IFR. Ismail (2002) examined the relationship between industrial sector and IFR in three GCC countries (Qatar, Bahrain, and Saudi Arabia) and found a positive relationship. In addition, Joshi and Al-Modhaki (2003) examined Kuwait and Bahrain for the same factor and found a positive relationship. Contrarily, Momany and Al-Shorman's (2006) study in Jordan; Al-Motrafi's (2008) in Saudi Arabia; Desoky and Mousa's (2009) study in Bahrain; and Oyelere and Kuruppr's (2010) study in the UAE found no relationship between industrial sector and IFR. Overall, this study investigates the relationship between industrial

sector and IFR and assumes there is a relationship in accordance with the majority of studies in Arab MENA countries. Type of Auditor will be discussed in the next section.

3.8.5 Type of Auditor

Levels of disclosure may vary according to the type of auditor that audits a company. The hiring of one the Big-4[36] may enhance a company's reputation; and according to Xiao et al. (2004), companies may gain some protection against the uncertainty and loss of control from disclosure via the internet if they have a Big-4 auditor. According to Wallace et al. (1994), Spanish companies with one of the big international audit companies are more likely to have voluntary disclosure (such as IFR). Not many studies investigate the relationship between the type of auditor and IFR; there are just 15 studies discussed in this thesis and they do not provide any clear evidence of the relationship between Big-4 auditors and IFR as shown in Table 3.19.

Table 3.19: Previous Studies' Findings of Type of Auditor Factor

Result	Number of studies	Percentage
Positive association	8	53%
No association	7	47%
Total	15	100%

Note: this table summarises results of previous studies that investigated the relationship between type of auditor and IFR.

Table 3.19 shows that of the fifteen studies that examine this factor (see Appendix 3.8 for more details), eight studies find a positive relationship between type of auditor and IFR (Xiao et al., 2004; Bonsón and Escobar, 2006; Al-Sahmmari, 2007; Alanezi, 2009; Elsayed, 2010; Agboola and Salawu, 2012; Boubaker et al., 2012; Momany and Pillai, 2012); and seven studies find no relationship between type of auditor and IFR (Joshi and Al-Modhaki, 2003; Chan and

[36] The big four auditing firms are PricewaterhouseCoopers, Deloitte Touché Tohmatsu, Ernst and Young and KPMG.

Wickramasinghe, 2006; Al-Motrafi, 2008; Fekete et al, 2009; Aly et al., 2010; Agyei-Mensah, 2012; Alali and Romero, 2012).

Among the above mentioned studies, seven studies were conducted in Arab MENA countries; Al-Shammari (2007) and Alanezi (2009) investigated the relationship between type of auditor and IFR in Kuwait; and both studies find a positive association. In Egypt, Aly et al. (2010) and Elsayed (2010) find different results; Aly et al. (2010) investigated only the most traded companies and found no relationship whereas Elsayed (2010) investigated all listed companies in Egypt and found a positive relationship; and differences in both findings may due to the differences of samples. In addition, Momany and Pillai (2012) reported that the relationship between type of auditor and IFR in the UAE is significant. Contrarily, Joshi and Al-Modhaki's (2003) study in Kuwait and Bahrain and Al-Motrafi's (2008) study in Saudi Arabia found no relationship between type of auditor and IFR. This thesis follows some of the prior literature by including type of auditor as a factor that may explain the variation of IFR in Arab MENA countries, and assumes a positive relationship. The next section reviews prior literature regarding the country factor.

3.8.6 Country

A country's culture may be a factor that affects IFR (Radebaugh and Gray, 1997; Bonsón and Escobar, 2002). Since this study is looking at voluntary disclosure via the internet in all Arab MENA countries, it is important to investigate whether or not the country affects the level of IFR. The prior literature reveals that very few studies (eight studies are discussed in this thesis) have investigated the effect of country on IFR and these provide evidence of the existence of a relationship between country and IFR as shown in Table 3.20.

Table 3.20: Previous Studies' Findings of Country Factor

Result	Number of studies	Percentage
Positive association	6	75%
No association	2	25%
Total	8	100%

Note: this table summarises results of previous studies that examined the association between country and IFR.

Table 3.20 shows that the majority of these studies (see Appendix 3.9 for more details) indicate that the country in which a company operates affects their voluntary IFR practice (Bonsón and Escobar, 2002; Debreceny et al., 2002; Ismail, 2002; Allam and Lymer, 2003; Geering et al., 2003; Bollen et al., 2006); two studies find no relationship (Joshi and Al-Modhaki, 2003; Bonsón and Escobar, 2006).

Among the above mentioned studies, two were conducted in Arab MENA countries (Ismail, 2002; Joshi and Alodhaki, 2003); Ismail (2002) investigated the effect of country on IFR in Qatar, Bahrain, and Saudi Arabia; and revealed that there is a significant relationship between country and the adoption of IFR; this effect may be explained by the differences in the establishment dates between the three stock exchanges, where Saudi Arabia has had its stock exchange since 1930s, the Bahrain Stock Exchange was established in the late of 1980s, and the Qatar Stock Exchange was not established until the end of 1990s. This study assumes to find a relationship between country and IFR.

3.8.7 Region

Since this study investigates IFR in Arab MENA countries from two regions namely Middle East and North Africa, it is a chance to find out whether IFR is different from one region to another. The reason to investigate this variable is that variations in IFR may not only be because of country effect but also because of region effect. Comparing MENA regions (see Chapter 2)

shows that the GCC region has more listed companies, more internet users and a higher market capitalisation than the other two regions; this would suggest that IFR in this region will be more widespread than in the other regions and listed companies within this region may form a community of practice. To the best of researcher's knowledge, there have not been previous studies that investigated the effect of region on IFR and hence contributed to our knowledge.

3.9 Summary

This chapter has reviewed the literature related to IFR and outlined elements on financial disclosure in general and IFR in particular; different approaches have been applied to investigate IFR in both developed and developing countries. The earlier descriptive studies attempted to investigate the level of companies' IFR through developed and developing countries, with studies conducted in developed countries far outweighing those in developing countries. Most of these studies have been conducted in a single country and few studies are conducted in multi-country settings. The findings of those studies show that the use of the internet for disseminating financial reporting has increased. Furthermore, these studies indicate the importance of the internet as a tool that can be used by companies not only for marketing purposes but also for financial purposes.

Despite the growing usage of IFR, it is still in its infancy in developing countries (Khadaroo, 2005) and very few studies focus on Arab MENA countries; and those that do are conducted in the Middle East region in general and in the Gulf Cooperation Council (GCC) countries in particular; in addition to only one North African country, namely Egypt. In contrast, this study investigates IFR in all Arab MENA countries; and looks at institutional factors such as company size, profitability, leverage, auditor type, industrial sector, country, and region; as they are all generally found to be significant to some extent. None of the previous studies have adopted an

institutional perspective, which is utilised in the thesis and hence contributes to our knowledge of the topic. The theoretical framework of institutional theory will be discussed in the next chapter.

Chapter 4: Theoretical Framework

Chapter 4

Theoretical Framework

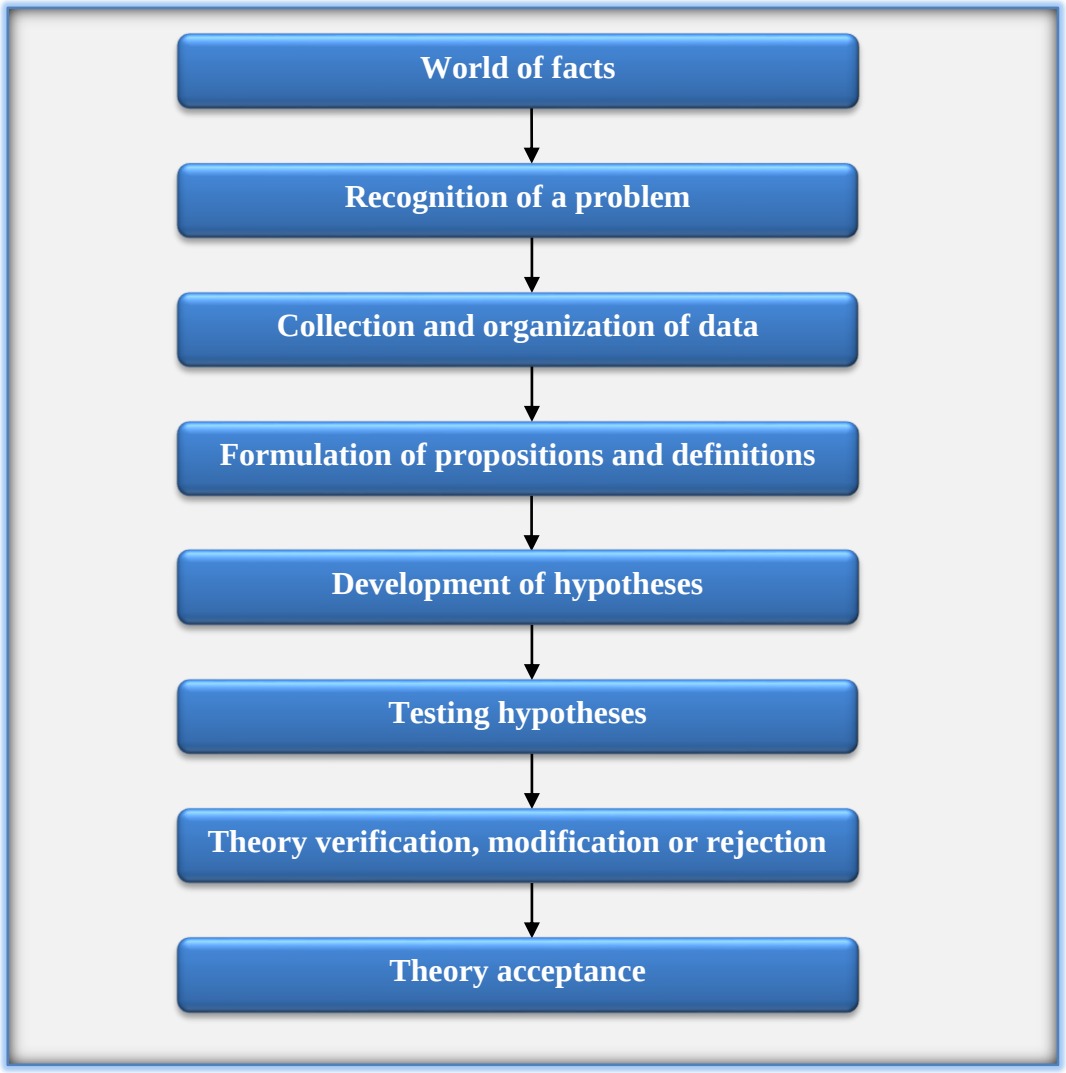
4.1 Introduction

The previous chapter reviewed the literature on internet financial reporting (IFR) practice and the factors that influence companies to adopt this practice. This chapter discusses the theory that provides the explanatory grounds for this research on adopting IFR in Arab MENA countries. The theoretical framework is institutional theory that considers the different types of institutional pressures (institutional isomorphism: coercive, mimetic, and normative) that have affected and shaped the current practice of IFR in Arab MENA countries' listed companies. This thesis tries to answer the two research questions: i) to what extent do listed companies in Arab MENA countries engage in IFR? and ii) what factors influence IFR adoption in selected Arab MENA countries? This will be done by investigating company's characteristics (such as: company size, profitability, leverage, industrial sector, and type of auditor); and the country and the region effect; and interpreting the findings of this study in light of institutional theory. This chapter outlines the theoretical framework, which is adopted to develop and interpret the findings of this research. This study will use new institutional sociology (NIS) perspective to investigate voluntary disclosure via the internet (IFR) in Arab MENA countries. This chapter is organised as follows: section 4.2 focuses on the definition and role of theory; section 4.3 discusses institutional theory in general and NIS perspective in particular; section 4.4 is a summary of the chapter.

4.2 Theoretical Framework

A theoretical framework is a conceptual model of how researchers make sense of the relationships among the factors that are identified as important to study. A theoretical framework helps researchers to hypothesise and test certain relationships and, therefore, to develop an understanding of the topic (Sekaran, 2003). According to Ziolkowski (2005), theories are comprehensive orderings of reality, giving meaning to facts within a paradigm, rather than arising out of them, and to be of value they should be testable and therefore exposed to the possibility of being rejected on empirical grounds. In this context, Remenyi et al. (1998) define a theory as: "A scientifically acceptable general principle or set of principles offered to explain a phenomenon or a group of phenomena." (p. 290). Abrahamson (1991) highlights that a theory should have greatest explanatory power when the assumptions that underlie it match the context in which researchers test this theory. Glautier and Underdown (2001) state that "empirical theories are constructed by the process of verifying assumptions, or hypotheses, through the test of experience" (p.17); they reveal that the process, which is known as the scientific method, consists of many steps as shown in Figure 4.1.

Figure 4.1: The Process of Theory



Source: Glautier and Underdown (2001, p. 16).
Note: This figure shows the process of a theory.

It can be said that without a theory it is hardly possible to provide a systematic and comprehensive approach to classification and interpretation of the studied phenomena (Ziolkowski, 2005). A theory plays a role in presenting a framework for understanding, interpreting and explaining the phenomenon being researched; and this role can be divided into the four perspectives of: description, delimitation, generation and integration; and these dimensions can be determined by the structure of a theory (Belkaoui, 1987); Table 4.1 summarises the four functions of a theory.

Table 4.1: Dimensions Role of a Theory

Dimension	Description
Descriptive role	Consists of using the constructs or concepts and their relationships to provide the best explanation of a given phenomenon and the forces underlying it.
Delimiting role	Consists of selecting set of events to be explained and assigning a meaning to the formulated abstractions of the descriptive stage. Constraints on or boundaries around speculation and hunches serve that delimiting purpose.
Generative role	The ability to generate a testable hypothesis, which is the main objective of a theory, or to provide hunches, notions and ideas from which hypotheses could be developed.
Integrative role	The ability to present a coherent and consistent integration of the various concepts and relations of a theory.

Source: Belkaoui (1987; p. 209).
Note: This table shows the four dimensions of the role of a theory.

The above table outlines how researchers use theory to explain and interpret a phenomenon they research; and this theory gives the ability to create hypotheses and then test these hypotheses. The generative role is adopted in the current study where hypotheses will be formulated and tested as shown in Chapter 7. This is in contrast to Chapter 6 where the descriptive dimension of theory is developed to capture the profile of markets operating in Arab MENA countries. The Arab MENA countries are then selected, therefore, delimited for further analysis in Chapter 7. Theory is finally used to interpret all the results in an integrative manner to explain IFR in selected Arab MENA countries.

Fields et al. (2001) highlight that researchers who are structuring empirical experiments and identifying appropriate variables and formulating alternative hypotheses need a comprehensive theory of accounting which is presently not available and possibly unachievable. Regarding disclosure, Verrecchia (2001) reveals that there is no comprehensive, or unifying, theory of disclosure although there are many accounting literatures that discuss the notion of disclosure.

On the extent of voluntary disclosure, Marston and Shrives (1991) highlight that there is no general theory that offers guidance on the selection of items to measure the extent of voluntary disclosure. With regard to IFR, Alanezi (2009) mentions that no broad or unifying theory of IFR exists. Therefore, many researchers explain the practice of financial reporting and voluntary disclosure (such as IFR) by using different theories that complement each other. These theories include agency theory, signalling theory, innovation diffusion and political costs theory; more specifically, the theories that have been used the most are: agency theory and signalling theory. However, the majority of these studies are conducted in the USA and UK markets where the liquid capital markets are large; and this is not the case in Arab MENA countries. Therefore, these theories are not appropriate to be used in this study. According to Rowbottom et al. (2005), institutional theory may give rationales for IFR; they state that "Institutional theory suggests that online disclosure may be driven by a desire to conform to social or capital expectations" (p. 7). Furthermore, one more reason why institutional theory is relevant to this thesis is that it provides a perspective in understanding how companies respond to changing culture, social environmental, economic, political, and institutional pressures and expectations; moreover, it links a company's practices (for example, IFR) to the values of the society in which a company operates, and the need to maintain a company's legitimacy (Deegan and Unerman, 2006). In this context, Dillard et al. (2004) mention that institutional theory provides an explanation of the mechanisms through which companies seek to align perceptions of their practices and characteristics with social and cultural values. Accordingly, the focus of this thesis is to evaluate and investigate IFR practices in Arab MENA listed companies from the perspective of institutional theory which is the focus of the remainder of this chapter.

4.3 Institutional Theory

Institutional theory is driven by the problem of why different organisations, operating in very different environments, are often so similar in structure (Tolbert and Zucker, 1994). Deegan and Unerman (2006) note that institutional theory has developed since the late 1970s by researchers such as Meyer and Rowan (1977), DiMaggio and Powell (1983), Zucker (1987), and Powell and DiMaggio (1991). Deegan and Unerman (2006) state that institutional theory "has become a major and powerful theoretical perspective within organisational analysis, it has also been adopted by some accounting researchers" (p. 296). In this context, Dillard et al. (2004) state that:

> "Institutional theory is becoming one of the dominant theoretical perspectives in organization theory and is increasingly being applied in accounting research to study the practice of accounting in organizations." (p. 506)

Before discussing the details of institutional theory, it is important to clarify what constitutes an institution, as there can be varying understandings of institutions depending upon a particular approach of this theory that is used by researchers. According to Hodgson (2006), an institution is a set of rules that structure social interactions in particular way and states that "institutions are the kind of structures that matter most in the social realm: they make up the stuff of social life" (p. 138). According to Scott (2001) rules, norms, and cultural beliefs are ingredients of institutions; in addition, institutions have a constraining character in that they can:

> "… impose restrictions by defining legal, moral, and cultural boundaries setting off legitimate from illegitimate activities. But it is essential to recognize that institutions also support and empower activities and actors. Institutions provide guidelines and resources for acting as well as prohibitions and constraints on action." (Scott, 2001; p. 50)

Regarding the term of institutionalisation, Selznick (1957) mentions that institutionalisation is a process which means that an organisation will be affected by its surrounding environment. Accordingly, the degree of institutionalisation can vary but no organisation is completely free

of it. According to Huntington (1968), institutionalisation is a process in which organisations and procedures acquire value, stability and legitimacy in order to achieve their aims in society. Tolbert and Zucker (1983) reveal that institutionalisation is a process of social change; they state:

> "Institutionalisation refers to the process through which components of formal structure become widely accepted, as both appropriate and necessary, and serve to legitimate organisations." (p. 25)

Moll et al. (2006) explain institutional theory by distinguishing between three main sub-theories or branches of it that have exerted the most influence. These branches are old institutional economics (OIE), new institutional economics (NIE), and new institutional sociology (NIS).

The OIE is used to understand what shapes practices in individual organisations (Scapens, 2006); it is particularly suited to the analysis of processes of change (Ribeiro and Scapens, 2006; Burns and Scapens, 2000). In other words, it is intended to understand, explain, and describe why and how particular systems, rules, norms, or behaviours become what they are, change, or stabilise through time (Burns, 2000; Scapens, 2006). From an OIE viewpoint, human behaviour is seen as evolutionary, dynamic and in a constant process of change (Yazdifar, 2004).

The NIE, however, uses economic reasoning to explain diversity in forms of institutional arrangements (Scapens, 2006). It assumes that individuals are rational in their decision making; Scapens (2006) states that:

> "It adopts rational economic approach, starting from assumptions of bounded rationality and opportunism, to explain why transactions are organised in particular ways and why firms have hierarchical structures." (p. 11)

This thesis will approach institutional theory from the third perspective, NIS which focuses on how or why companies adopt their practices (for example, IFR practice) in order to be able to conform to society-level regulations and expectations (Burns, 2010).

NIS is the newest form of institutional theory, originating from 1970s and developed to become a major theoretical perspective in the sociological field (Scott, 2001). It typically focuses on the `macro` level of organisational fields (Moll et al., 2006); and directs attention toward forces that lie beyond the organisational boundary, in the realm of social processes (Hoffman, 1999). This theory is based on "an assumption that intra-organisational structures and procedures and practices, including accounting, are largely shaped by external factors" (Moll et al., 2006; p. 186). In this sense, Hoffman (1999) states:

> "A firm's action is seen not as a choice among an unlimited array of possibilities determined by purely internal arrangements, but rather as a choice among a narrowly defined set of legitimate options determined by the group of actors composing the firm's organisational field" (p. 351).

Institutional theorists conceptualised the organisational field as the domain where an organisation's actions were structured by the network relationships within which it was embedded (Wooten and Hoffman, 2008). Davis and Marquis (2005) noted that the organisational field has become the most employed unit of analysis for understanding processes of both change and persistence in institutional theory. Following DiMaggio and Powell (1983), organisational field means "… those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products" (p. 148). Similarly, Scott (1995) defines organisational field as:

> "… a community of organizations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field" (p. 56).

The current study's organisational field is all listed companies in Arab MENA countries. However, Vermeulen et al., (2009) point out that a focus on the organisational field as the unit of analysis may not always capture the heterogeneity and multidimensionality on several dimensions within these industry organisations; they reveal that organisations are not only part of an organisational field but they are also located in different environments and are part of different communities within which institutional processes occur. Accordingly, studies have attempted to focus on studying and examining the role that communities play in driving organisational activities; rather than fields as the unit of analysis (Vermeulen et al., 2009). The concept of community of practice was introduced by Lave and Wenger in 1991; it refers to:

> "… a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice. A community of practice is an intrinsic condition for the existence of knowledge, not least because it provides the interpretive support necessary for making sense of its heritage" (Lave and Wenger, 1991; p. 98).

Most researchers in sociology argue that organisations adopt particular structures and practices because of external factors (Moll et al., 2006). Many researchers (see for example: Meyer and Rowan, 1977; and DiMaggio and Powell, 1983) have used this theory to explain the adoption of new practices by organisations. Meyer and Rowan (1977) argue that such adoption provides legitimacy to organisations. Institutionalised organisations tend to adopt structures and procedures that are valued in their social and cultural environment. Ribeiro and Scapens (2006) argue that this environment forces organisations to adopt structures and practices in order to achieve legitimacy and secure the resources which are essential for their survival. According to Scott et al. (2000), this legitimacy is important to organisations; they state that:

> "Organizations require more than material resources and technical information if they are to survive and thrive in their social environments. They also need social acceptability and credibility." (p. 237)

Suchman (1995) defines legitimacy as:

> "… a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions." (p. 574)

From an institutional perspective legitimacy is "a condition reflecting perceived consonance with relevant rules and laws, normative support, or alignment with cultural-cognitive frameworks" (Scott, 2001; p. 59). Meyer and Rowan (1977) argue that legitimacy emerges as one of the key reasons for organisations becoming similar, leading to the institutional isomorphism of organisational attributes which will be discussed later.

Ribeiro and Scapens (2006) reveal that this search for legitimacy explains why specific organisational forms and procedures are diffused across organisations operating in the same line of business. In this sense, organisations that are operating in similar settings are assumed to be influenced by comparable demands (Meyer and Rowan, 1977; DiMaggio and Powell, 1983) such that organisations adopt similar practices (for example, IFR) because they are influenced by external institutional pressures. From this point of view, DiMaggio and Powell (1983) suggest that organisations become isomorphic (corresponding or similar in form and relations) with other organisations in their institutional setting because of pressures which are created by this process of diffusion. Dillard et al. (2004) reveal that the adoption of an institutional practice by an organisation means isomorphism. In other words, isomorphism or homogeneity is a process through which organisations, within the same organisational field, interact to become increasingly similar; this process happens because of the actions of powerful external forces and

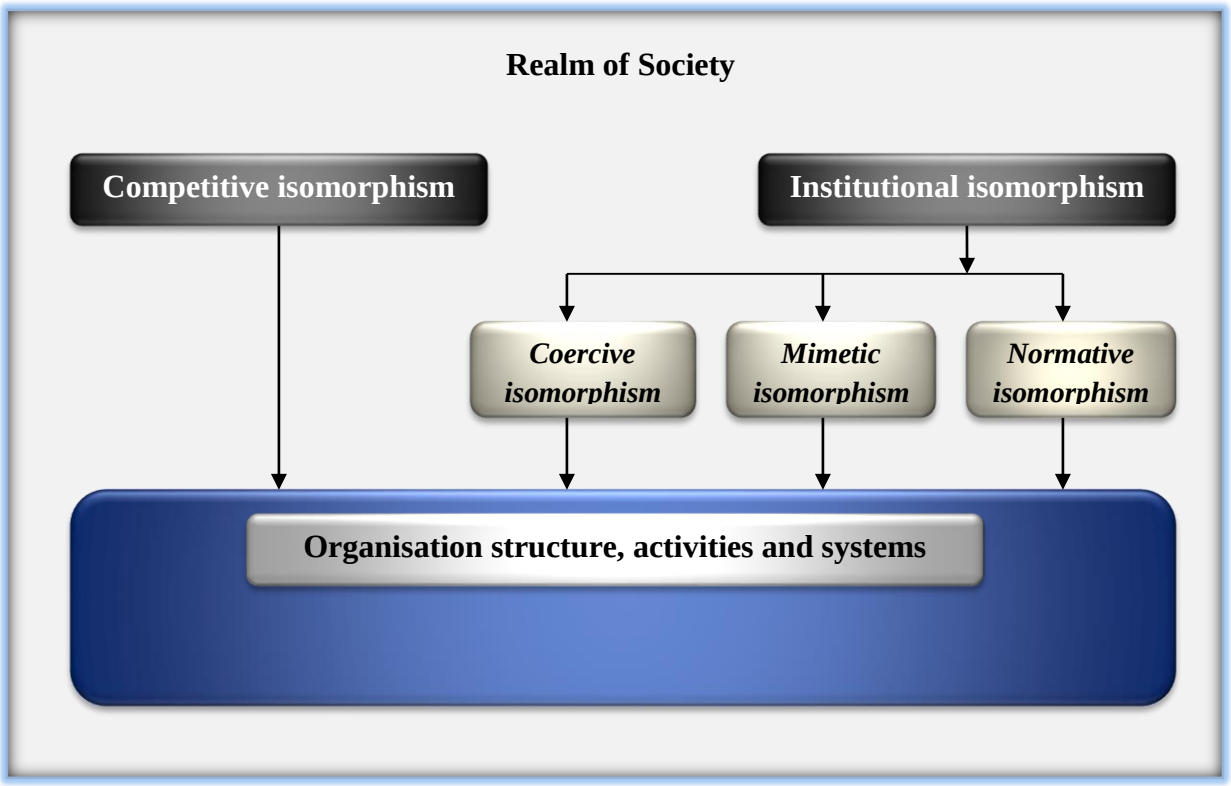
may lead organisations to "change their goals or develop new practices" (DiMaggio and Powell, 1983; p. 148). Following Hawley (1968), an isomorphism is described as a "constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions" (DiMaggio and Powell, 1983; p. 149).

George et al. (2006) reveal that the isomorphic comes out from external environment; they state:

> "Isomorphic responses are those actions taken by an organization in response to an environmental stimulus that are consistent with the responses of other actors in the environment." (p.353)

Isomorphism means "the ways in which organisations come to have the same general form" (Carruthers, 1995; p. 316). In view of that, organisations adopt the same practices and procedures because of rationalised concepts of organisational work and institutionalisation in society increasing organisations' legitimacy and their survival prospects (Meyer and Rowan, 1977). In this sense, DiMaggio and Powell (1983) adopted the ecological concept of isomorphism to describe the process of homogenisation; they divided this concept into two types of isomorphism; competitive isomorphism and institutional isomorphism. Figure 4.2 below shows the mechanisms and drivers of homogeneity in organisational forms and practices from the NIS view.

Figure 4.2: Drivers of Homogeneity in Organisational Forms and Practices: NIS View



Source: Yazdifar (2004; p. 121).
Note: This figure shows the mechanisms and drivers of homogeneity in organisational forms and practices.

Figure 4.2 shows that both competitive isomorphism and institutional isomorphism affects an organisation's form and practices; and that institutional isomorphism can be via three pressures, coercive, mimetic, and normative which will be discussed in more details in this section.

Mizruchi and Fein (1999) state that "competitive isomorphism involves pressures toward similarity resulting from market competition" (p. 656). Consistent with this description, Moll et al. (2006) reveal that competitive isomorphism is driven from market pressure, explaining that competitive factors lead organisations to adopt least-cost, efficient structures and practices. DiMaggio and Powell (1983) suggest that competitive isomorphism is most appropriate when fields include free and open competition; and this is not the case in Arab MENA countries.

Institutional isomorphism, from the view point of DiMaggio and Powell (1983), involves organisational competition for political and institutional legitimacy; they state: "the concept of institutional isomorphism is a useful tool for understanding the politics and ceremony that pervade much modern organisational life" (p. 150); in this context, Meyer and Rowan (1977) argue that institutional isomorphism motivates the prosperity and survival of organisations.

Tuttle and Dillard (2007) state that "all three processes of institutional isomorphism (mimetic, coercive, and normative) appear to be shaping the organisational field of accounting research" (p. 387). Extending institutional theory into the domain of this thesis, the researcher proposes that responses to identifiable institutional influences rather than competitive forces account for the current pre-eminence of IFR. For instance, DiMaggio and Powell (1983) state that "Subsidiaries must adopt accounting practices, performance evaluations, and budgetary plans that are compatible with the policies of the parent corporation" (p. 151).

Coercive isomorphism is where external factors such as government policies, regulation, or supplier relationships make organisations adopt particular internal structures and processes (such as IFR) (Moll et al, 2006). This type of isomorphism has two pressures: i) from other organisations upon which an organisation is dependent; and ii) the cultural expectations of society at large (Carruthers, 1995). Coercive isomorphism is linked to the environment that surrounds the organisation (Frumkin and Galaskiewicz, 2004). Such pressures can manifest in many forms including authorisation, persuasion, and the provision of incentives (DiMaggio and Powell, 1983). These pressures may come from government agencies, regulatory bodies, or other powerful organisations in the same field (Ravichandran et al., 2009). In this sense, Bjorck (2004); Guler et al. (2002); Ketokivi and Schroeder (2004) argue that coercive isomorphism pressures are represented by rules enshrined in legal requirements, customer requirements, and

owner requirements; for instance, powerful customers may use their power to diffuse certain practices (such as IFR). In addition, it can include pressures from international networks of multinational companies.

From the above mentioned discussion, coercive isomorphism is a type of pressure that may constrain organisations operating in the same line of business to adopt specific practices or procedures; and the reason why organisations respond is to increase the organisation's legitimacy. Regarding IFR, organisations may have been coerced by one of the above mentioned isomorphism to adopt this practice such as regulatory bodies or stock exchange listing requirements.

DiMaggio and Powell (1983) argue that mimetic isomorphism may come because of uncertainty; they reveal that uncertainty has a great force which leads imitation. Mimetic isomorphism takes place when organisations clone the behaviour of leading peers as a response to uncertainty (Ravichandran et al., 2009). Oliver (1997) states that "mimetic pressures occur through organisational imitation or modelling of norms or practices in the organisation's institutional field" (p. 103). In this sense, Dillard et al. (2004) identify mimetic isomorphism as:

> "Mimetic isomorphism is a process that takes place when an organisation attempts to imitate a more successful referent organisation, a process that is often due to the uncertainty and lack of guidance in its own environment" (p. 509).

DiMaggio and Powell (1983) argue that when organisations respond to uncertainty, they become modelled organisations; such organisations may have no desire to be modelled and may be unaware of being used as a role model; and state that:

> "… organisations tend to model themselves after similar organisations in their field that they perceive to be more legitimate or successful" (p. 152).

Chiravuri and Ambrose (2002) mention that organisations follow the leading organisations in their field hoping that they will have the same success. DiMaggio and Powell (1983) provide the motivations as to why organisations model themselves on other organisations: i) technologies of organisations are almost always not understood; ii) organisations' goals are not clear; and iii) the uncertainty created by the environment. In this sense, Ravichandran et al. (2009) state that "mimetic pressures from peers exist today because of the ambiguities associated with the use of new and emerging technologies" (p. 688); where imitation of peers is very likely when such ambiguities are present. Mimetic isomorphism happens when organisations, for instance companies, like to be similar to each other, and often organisations in the same line of business adopt new and similar practices (such as IFR) just to be alike; and therefore, they are under mimetic pressure. Hence, companies in the same industry, irrespective of country may adopt similar practices such as having IFR.

Normative isomorphism, the third mechanism of institutional isomorphism, occurs primarily from professionalization (DiMaggio and Powell, 1983; Carruthers, 1995; Dillard et al., 2004). Kholeif et al. (2007) define normative isomorphism as "the institutionalisation of social practices as a result of professionalization by means of professional groups" (p. 253). Ravichandran et al. (2009) state that "normative isomorphism occurs through a collective normative order, including the professional norms and widespread agreements shared by organisations in a relational network" (p. 679). Lammers and Barbour (2006) mention that normative isomorphism stems from practices being considered appropriate by trade, industry, and professional associations. DiMaggio and Powell (1983) reveal that professionalization can be seen from two forms as significant sources of isomorphism. One results from education and comes out of the universities; the second arises from professional networks and the cross of professionals between

organisations. Companies adopt a new practice (such as IFR) because they are recommended to do so by particular professional bodies (Carpenter and Feroz, 1992). In this context, Ribeiro and Scapens (2006) highlight that professional bodies can generate normative pressures. Baker and Rennie (2006) define normative isomorphism as:

> "… largely associated with professions, represents the influence of "normal" standards, conduct, and working conditions. It explains similar behaviour by members of distinguishable professional groups, often seen as experts, such as accountants, across organisations." (p. 87)

DiMaggio and Powell (1983) interpret professionalization as "the collective struggle of members of an occupation to define the conditions and methods of their work, to control the production of producers, and to establish a cognitive base and legitimation for their occupational autonomy" (p. 152). Normative pressures, in terms of voluntary reporting practices (such IFR), could occur via less formal group influences from a variety of both formal and informal groups to which organisations belong, such as the culture (Deegan and Unerman, 2006).

The professions play a key role by spreading similar orientations and characteristics that form organisational behaviour; this process comes via the legitimacy that education gives, and via the development of professional networks that cross organisations. Hence having a Big-4 auditor may normalise practices across countries and industries and affect IFR.

DiMaggio and Powell (1983) point out that the three mechanisms (coercive, mimetic, or normative) are not necessarily empirically distinguishable where each involves a separate process, as two or more could operate simultaneously and their effects will not always be clearly identifiable.

Xiao et al. (2004) highlight that IFR and voluntary disclosure studies have failed to know why organisations adopt IFR as an innovation. The reason of that may be due to the fact that previous studies have not employed institutional theory to explain the adoption of an innovation (IFR) by companies.

4.4 Summary

This chapter includes the theoretical framework adopted in this study and through which the researcher provides guidelines to interpret the findings of this study from a NIS perspective. This theory argues that organisations adopt a new innovation (such as IFR) because of external institutional pressures. Adopting a new innovation by organisations is process that is called institutionalisation through which an organisation will be influenced by its surrounding environment (organisational field). NIS is a form of institutional theory that has been used by many researchers to explain the adoption of new practices by organisations. Organisations tend to adopt new structures and procedures because they are valued in their social and cultural environment. Researchers in this field argue that such adaption provides legitimacy to organisations.

Organisations become isomorphic with organisations operating in the same organisational field because of diffused procedures. Isomorphism is divided into two types: competitive isomorphism and institutional isomorphism. While competitive isomorphism results from market competition, institutional isomorphism comes from organisational competition for political and institutional legitimacy. Institutional isomorphism is divided into three mechanisms namely: coercive, mimetic, and normative isomorphisms, which are affected by the institutional environment of legal, political, social and economic factors.

These legal, political, social, and economic factors play a key role in Arab MENA society; thus, they are important and may explain why listed companies in these countries adopt IFR. Consequently, NIS is chosen as appropriate theoretical framework to this thesis that investigates the factors that influence listed companies in Arab MENA countries to adopt IFR practices. In addition, it links a company's practices (such as IFR) to the values of society in which an organisation operates, and the need to maintain an organisation's legitimacy.

Chapter 3 in this thesis showed that the literature on IFR in Arab MENA countries is sparse. Thus, the first research question seeks to find out to what extent Arab MENA listed companies engage in IFR. The second research question uses an NIS perspective to look at the factors that may affect Arab MENA listed companies to adopt IFR.

Therefore, knowing the extent of IFR in Arab MENA listed companies, the theoretical framework in the current study is employed to find out how different types of external institutional effects influence the adoption of IFR by Arab MENA listed companies. The next chapter examines the research approach and methods used in this thesis.

Chapter 5: Research Methodology and Methods

Chapter 5

Research Methodology and Methods

5.1 Introduction

This study aims to investigate the reasons why listed companies in Arab MENA countries adopt the practice of internet financial reporting (IFR). The institutional theory that underpins the findings of this study was explained in Chapter 4, and the literature on IFR was reviewed in Chapter 3. It is necessary to empirically investigate the stated hypotheses (see Chapter 7); both the relevant literature and the theoretical framework together provide the basis for the appropriate methodology which determines the data collection and the methods of analysis. The major purpose of this chapter is to present the methodological issues related to the investigation carried out in this research; and to discuss the methods which underpin the analysis in this study. This chapter is organised as followed: Section 5.2 summarises the various philosophies that may adopted by different researches about the nature of social science and society and the research paradigms; Section 5.3 views the research methodology; Section 5.4 presents the research method before Section 5.5 summarises the chapter.

5.2 Research Philosophy

There are many definitions of research; one of which is defined by Krishnaswami and Satyaprasad (2010); they stated that:

> "Research simply means a search for facts- answers to questions and solutions to problems. It is a purposive investigation. It is an "organised inquiry." It seeks to find explanations to unexplained phenomenon, to clarify the doubtful propositions and to correct the misconceived facts. How is this search made? What are possible methods or approaches?" (p. 2).

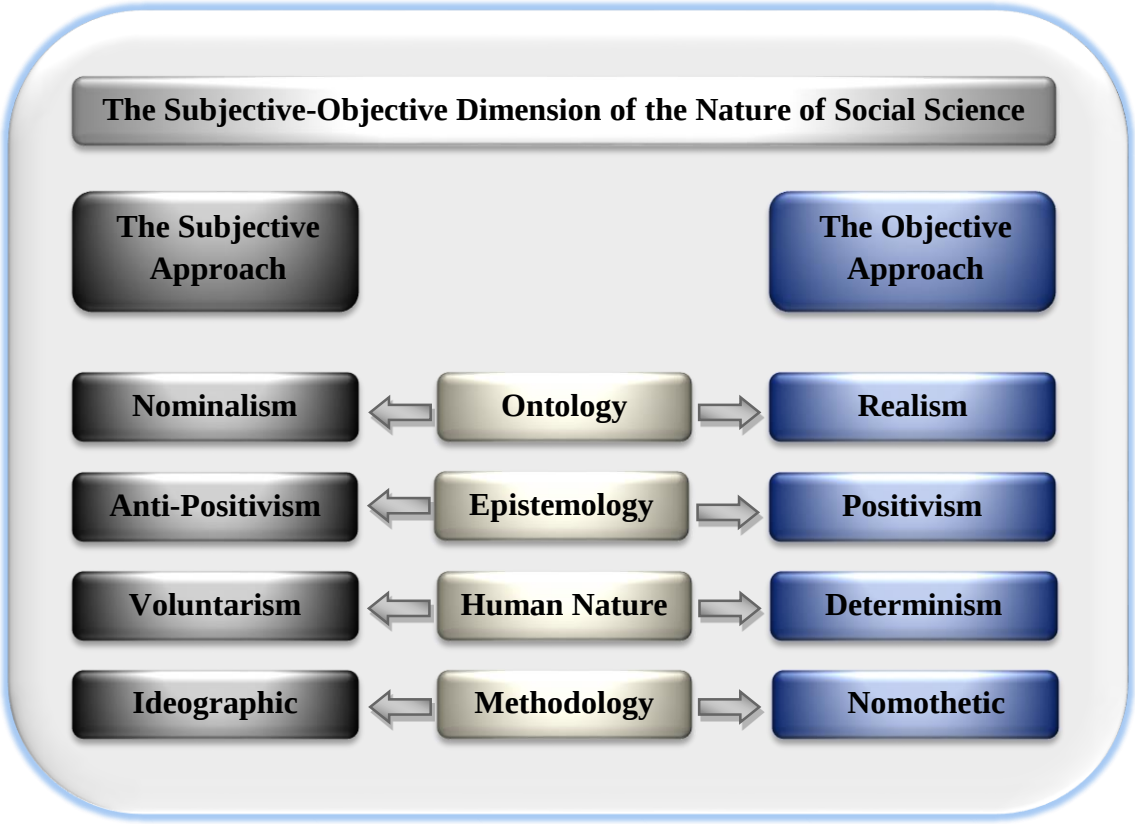
Saunders et al. (2007) reveal that research philosophy is related to the development of knowledge and its nature. Easterby-Smith et al. (2002) mention that there are at least three important reasons that are useful to understanding the philosophy of research because it can help: i) to clarify research designs; ii) the researcher to recognise which designs will work and which will not; and iii) the researcher identify designs that may be outside the researcher's past experience.

Burrell and Morgan (1979) revealed that there were different assumptions which were likely to predispose and direct researchers towards different methodologies and affect the selection process of an appropriate research paradigm. Collis and Hussey (2009) define a research paradigm as "a philosophical framework that guides how scientific research should be conducted" (p. 55). Burrell and Morgan (1979) mention that the research paradigm is a component of the research process; they emphasise that this component is very important for many reasons: i) it helps researchers to clarify the research assumptions about their views of both science and society; ii) it provides an understanding of how other researchers approach their work; and iii) it facilitates the process of research design and assists researchers to be aware of their position. In this context, Burrell and Morgan (1979) provide a framework based on the idea that "all theories of organisation are based upon a philosophy of science and a theory of society" (p. 1). This framework includes two dimensions, namely the subjective-objective social world dimension "assumptions about the nature of social science" and the regulation-radical change nature of society dimension "assumptions about the structure of society".

5.2.1 Assumptions about the Nature of Social Science

Burrell and Morgan (1979) provide four philosophical assumptions that determine the research's position in research: i) ontology; ii) epistemology; iii) human nature; and iv) methodology. Each of these assumptions reflects two philosophical positions about two research philosophies (the subjectivism and objectivism orientations to social science). Figure 5.1 reproduces a schematic diagram which is presented by Burrell and Morgan (1979) to illustrate these four assumptions.

Figure 5.1: Assumptions regarding the Nature of Social Science



Note: This figure shows the Burrell and Morgan's (1979) scheme for analysing assumptions regarding the nature of social science.
Source: Burrell and Morgan (1979; p. 3).

The ontological assumption of social science research is concerned with the researcher's beliefs about the nature of reality. Crotty (1998) defined the ontological assumption as the study of the nature of reality or being, and it is concerned with understanding 'what is' , with the nature of

existence, and the structure of reality as such. Burrell and Morgan (1979) reveal that the ontological assumption is related to the very essence of the phenomena under investigation; and it raises the basic question about the nature of reality; Burrell and Morgan (1979) believe that the basic ontological question is:

> "Whether the 'reality' to be investigated is external to the individual – imposing itself on individual consciousness; whether 'reality' is of an 'objective' nature, or the product of individual cognition; whether 'reality' is a given 'out there' in the world, or the product of one's mind" (p. 1).

The ontological assumption can be seen from two approaches which are the subjectivist and the objectivist. The subjectivist approach, which is known as Nominalism, sees the social world as the outcome of individual consciousness. The objectivist approach, which is known as realism, assumes that reality is external and exists independently of an individual's appreciation.

Burrell and Morgan (1979) mention that the Nominalism perspective assumes that researchers are not independent from their previous experiences; it believes that the social world is created by individual consciousness and its names, concepts and labels created by individuals to understand it and to communicate the conceptions of the social world to others. Morgan and Smircich (1980) reveal that nominalism approach supposes that social world is not real and the reality is perceived as a projection of human imagination. By contrast, the Realism approach assumes that social world is real and made of hard, tangible, concrete things and with a relatively constant structure (Burrell and Morgan, 1979).

In other words, realists believe that reality is objective and singular; and hence they use quantitative research methods; whereas nominalists believe that reality is subjective and multiple; and hence they use qualitative research methods (Nwokah et al., 2009).

According to the ontology, the basic ontological question is "what is the nature of reality?" (Nwokah et al., 2009; p. 433). However, the epistemological question is "what the nature of the relationship between the knower or would-be knower and what can be known" (Guba and Lincoln, 1994; p. 108). In addressing this question, Burrell and Morgan (1979) note that subjectivists adopt Anti-Positivism whereas objectivists adopt Positivism.

Epistemological assumptions are about the nature of knowledge (Burrell and Morgan, 1979); Ryan et al. (2002) see epistemology as dealing with the method undertaken while gathering information. In this sense, Crotty (1998) identifies epistemology as: "the theory of knowledge embedded in the theoretical perspective and thereby in the methodology" (p. 3). Hussey and Hussey (1997) argue that epistemology is concerned with the study of knowledge and what is accepted as being valid knowledge.

Anti-positivists are qualitative and subjective in nature; they believe that the researcher interacts with what is being researched and he or she may be involved in any kind of participative enquiry (Nwokah et al., 2009); in addition, they reject objectivity and the need for independence of the observer (Burrell and Morgan, 1979). Positivists on the other hand are quantitative and objective in nature; they belief that researchers are independent from that being researched and only phenomena, which are observable and measurable, can be validly regarded as knowledge (Nwokah et al., 2009).

The third assumption in the research process according to Burrell and Morgan (1979) is human nature. It is concerned with the relationship between human beings and their environment; such a relationship is influenced by the first process 'ontology' and the second process

'epistemology', but theoretically split from them (Burrell and Morgan, 1979). Voluntarism and determinism are the two main dimensions that underpin this idea. Voluntarism assumes that human beings are independent and free-willed; in addition, this dimension sees individuals as the creators and controllers of their actions and environment; by contrast, determinists see human beings and their knowledge as being affected by their environment (Burrell and Morgan, 1979).

Methodology is the last assumption regarding the nature of social science in the Burrell and Morgan (1979) framework. The term methodology refers to "the theory of how research should be undertaken" (Saunders et al. 2009; p. 3). Burrell and Morgan (1979) state that different ontology; epistemology and human nature assumptions direct or lead to different methodologies being used by social science researchers. The nation of this assumption is about how the researcher gains knowledge about the world. The ideographic 'subjectivist' and the nomothetic 'objectivist' are the two approaches of the spectrum covering this assumption. From an ideographic approach standpoint, Burrell and Morgan (1979) see that the social world can be understood by obtaining first hand-know of the subject under investigation, and that means researchers are required to get inside situations and learn the complexities of particular issues; "the ideographic method stresses the importance of letting one's subject unfold its nature and characteristics during the process of investigation" (p. 6); in such an approach, data can be gathered by adopting qualitative research methods, such as interviews and case studies.

By contrast, nomothetic methodologies adopt quantitative Morgan analysis protocols, procedures and techniques that obtain from the natural science (Burrell and Morgan, 1979). Objectivists under this assumption focus on testing research hypotheses and they use quantitative and experimental methods to achieve their objectives. Burrell and Morgan (1979) describe the nomothetic approach as follows:

> "It is epitomised in the approach and methods employed in the natural sciences, which focus upon the process of testing hypotheses in accordance with the canons of scientific rigour. It is preoccupied with the construction of scientific tests and the use of quantitative techniques for the analysis of data. Surveys, questionnaires, personality tests and standardised research instruments of all kinds are prominent among the tools which comprise nomothetic methodology". (pp. 6-7)

5.2.2 Assumptions about the Structure of Society

The second dimension of Burrell and Morgan's (1979) framework is the assumption about the nature of society. In addressing this assumption, two theories of order and conflict were advanced which are illustrated in Table 5.1. The order view of society explains the nature of social order and equilibrium and emphasises stability, integration, functional co-ordination and consensus (Burrell and Morgan, 1979) whereas, the conflict view of society emphasises change, conflict, disintegration and coercion (Burrell and Morgan, 1979).

Table 5.1: Order and Conflict Theories of Society

The order view of society emphasises:	The conflict view of society emphasises:
Stability	Change
Integration	Conflict
Functional co-ordination	Disintegration
Consensus	Coercion

Source: Burrell and Morgan (1979; p. 13).

Burrell and Morgan (1979) argue that order and conflict debate is a problematic issue may lead to various interpretations of the language used. Therefore, they replaced order and conflict theories by two dimensions: *regulation* and *radical change*. Table 5.2 illustrates the fundamental differences between the regulation and radical change dimensions.

Table 5.2: The Regulation-Radical Change Dimension

The sociology of Regulation is concerned with:	The sociology of Radical change is concerned with:
(a) The status quo	(a) Radical change
(b) Social order	(b) Structural conflict
(c) Consensus	(c) Modes of domination
(d) Social integration and cohesion	(d) Contradiction
(e) Solidarity	(e) Emancipation
(f) Need satisfaction	(f) Deprivation
(g) Actuality	(g) potentiality

Source: Burrell and Morgan (1979; p. 18).

Note: This figure includes elements that show the various aspects and interpretations about the nature of society for the two ends of the sociological spectrum.

Burrell and Morgan (1979) introduce the term 'sociology of regulation' as referring to the researchers who are concerned about giving explanations of society in which underlying unity and cohesiveness are emphasised:

> "It is a sociology which is essentially concerned with the need for regulation in human affairs; the basic questions which it asks tend to focus upon the need to understand why society is maintained as entity. It attempts to explain why society tends to hold together rather than fall apart". (p. 17)

In contrast, Burrell and Morgan (1979) reveal that the radical change approach is concerned about finding explanations for radical change, deep-seated structural conflict, modes of domination and structural contradiction which its researchers see as characterising modern society:

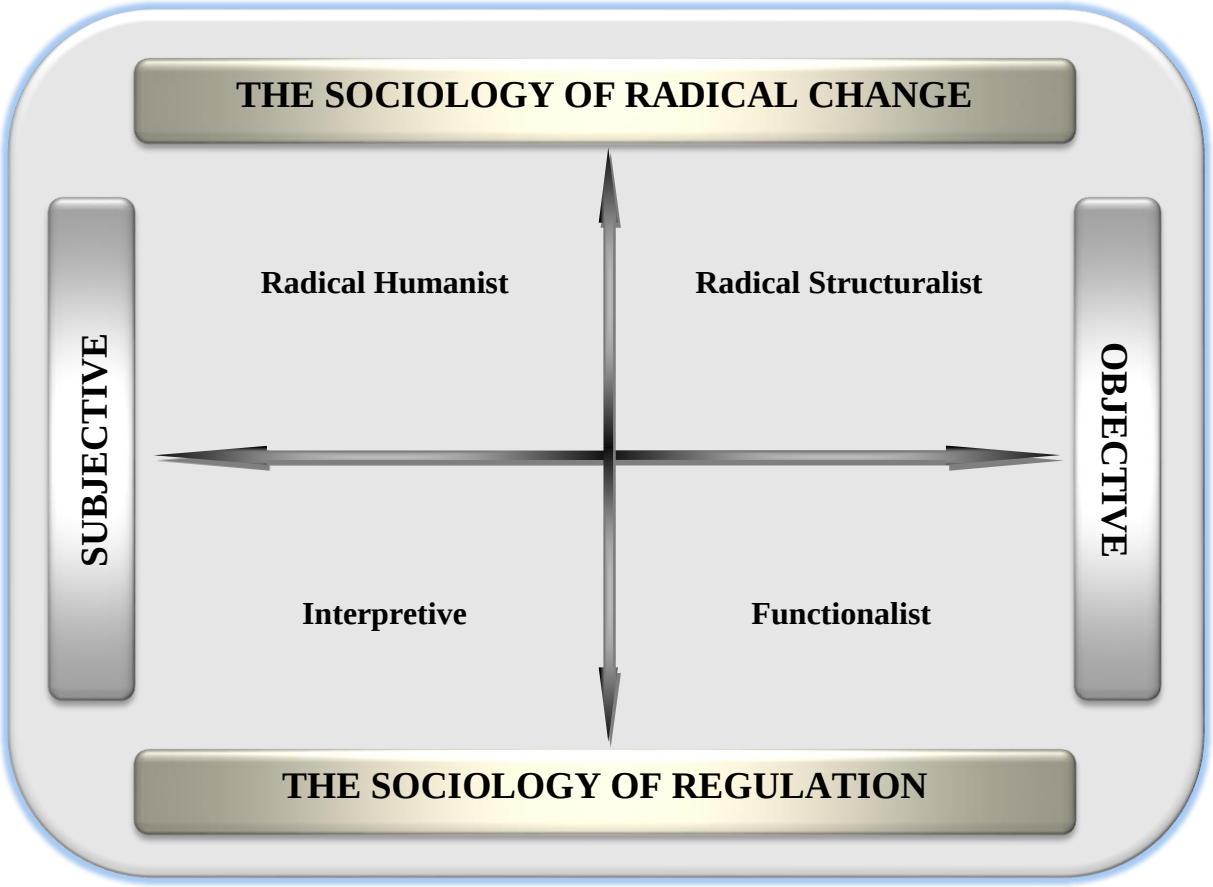
> "It is a sociology which is essentially concerned with man's emancipation from the structures which limit and stunt his potential for development. The basic questions which it asks focus upon the deprivation of man, both material and psychic". (p. 17).

5.2.3 The Burrell and Morgan Framework of Research Paradigms

Burrell and Morgan (1979) developed their classification framework to understand social science approaches to empirical research. They brought together the assumptions about the nature of social science "subjective-objective" and the assumptions about the nature of society

"regulation-radical change"; and the result of this combining is four paradigms namely: i) functionalist; ii) interpretive; iii) radical structuralist; and iv) radical humanist. These four paradigms are illustrated in Figure 5.2 below. Ardalan (2003) highlights that any analysis of the role of paradigms in social theory must recognise the assumptions that underwrite that paradigm or worldview.

Figure 5.2: Burrell and Morgan's Social Research Paradigms



Source: Burrell and Morgan (1979; p. 22).

Burrell and Morgan (1979) deal with a worldview, which defines the nature of the world, social world constituents and the possible relationship between the world and its social constituents. They argue that choosing a particular paradigm affects social-scientific reality, and therefore, researchers cannot choose more than one paradigm at any given point in time; however, they

can choose different paradigms sequentially over time. Ardalan (2003) mentions that each paradigm generates theories, concepts, and analytical tools are different from those of the other paradigms.

Combining objectivist and regulation together gives the functionalist paradigm, which assumes that society has a concrete existence and follows a certain order; it also presumes that scientific theories can be assessed objectively by reference to empirical evidence (Ardalan, 2003a). The functionalist paradigm tries to provide rational explanations of social issues and create regulative sociology (Ardalan, 2003b). Burrell and Morgan (1979) stated that:

> "It is a perspective which is highly pragmatic in orientation, concerned to understand society in a way which generates knowledge which can be put to use. It is often problem-orientated in approach, concerned to provide practical solutions to practical problems. It is usually firmly committed to a philosophy of social engineering as a basis of social change and emphasises the importance of understanding order, equilibrium and stability in society and the way in which these can be maintained. It is concerned with the effective 'regulation' and control of social affairs". (p. 26)

Moreover, the functionalist paradigm tends to be hypothesis driven and is associated with statistical testing.

The interpretive paradigm, on the other hand, adopts the subjectivist view of the social world and the regulation and order of societies. It represents the status quo as a given. Burrell and Morgan (1979) note that interpretive philosophers and sociologists "seek to understand the very basis and source of social reality. They often delve into the depths of human consciousness and subjectivity in their quest for the fundamental meanings which underlie social life". (p. 31)

Radical humanist paradigm combines of the subjectivist and radical change dimensions. It shares the interpretive paradigm's view of the subjective nature of the social world where the reality is

only a reflection of human cognition. This paradigm aims to "free organisation members from sources of domination, alienation, exploitation and repression by critiquing the existing social structure with intent of changing" (Gioia and Pitre, 1990; p. 588). Burrell and Morgan (1979) note that the radical humanist paradigm "views the social world from a perspective which tends to be nominalist, anti-positivist, voluntarist and ideographic" (p. 32).

By contrast, the radical structuralist, which is driven from combining the radical change and objectivist dimensions, mainly focuses on altering the universal structures and the order. The product of, and reflected in, organisational structures and relationships are the essential focus of structuralists (Hopper and Powell, 1985). According to Burrell and Morgan (1979), the radical structuralist paradigm sees the social world as based on realist, positivist, determinist and nomothetic assumptions. This thesis adopts a realist ontology and functionalist approach as discussed in the next section.

5.3 Research Methodology

This study aims to understand and explore the practices of internet financial reporting (IFR) in listed companies in Arab MENA countries. As mentioned in Chapter 4, this thesis uses a new institutional sociology framework to understand the effect of different types of institutional pressures (coercive, mimetic, and normative) on the adoption of IFR by listed companies in Arab MENA countries. This thesis aims to answer the following two questions: i) to what extent do list companies in Arab MENA countries engage in IFR? And ii) what factors influence IFR in selected Arab MENA countries? The effect of country, region, and company characteristics (such as: company size, profitability, leverage, industrial sector, type of auditor) will be investigated by testing hypothesises of these factors. The researcher employs an objective approach because this study is quantitative in nature and it aims to investigate the causal

relationship between the constituent elements of the social world. The researcher believes in realist ontology since it assumes that the social world is real and made of hard, tangible, concrete things and with a relatively constant structure. The investigation of the adoption of IFR by listed companies in Arab MENA countries in this thesis does not seek to make changes to the status quo. A positivist epistemology is employed as the researcher sees the adoption of IFR by listed companies in Arab MENA countries from an objective dimension, which seeks to explain why some listed companies in Arab MENA countries adopt IFR whereas others do not by searching for relationships between country, region, and company characteristics and the adoption of IFR. This thesis adopts a deterministic approach of human nature which assumes that adopting IFR by listed companies in Arab MENA countries is affected by human beings and the environment. Further, this study tests hypothesises to find the relationships between country, region, and company characteristics and the adoption of IFR by listed companies in Arab MENA countries; therefore, a nomothetic methodology is adopted because this objective dimension adopts quantitative analysis protocols, procedures and techniques that obtain from the natural science and focuses on testing research hypotheses. In particular, this study is located in the functionalist paradigm of Burrell and Morgan's matrix (see Figure 5.2) which aims to find the orders that prevail within the phenomenon of IFR. This paradigm "assumes that there are universal standards of science, which determine what constitutes an adequate explanation of what is observed. It assumes that there are external rules and regulations governing the external world" (Ardalan, 2003b; p. 1039).

5.4 Research Method

Researchers use many different methods in order to describe, explore and understand the phenomenon they conduct. Methods can generally be subdivided in two broad categories

namely: quantitative methods and qualitative methods (Pande, 2009). In general, research methods develop within a particular paradigm. As mentioned above, this study adopts functionalist approach that follows realism ontology, positivism epistemology, determinism human nature, and nomothetic methodology. Thus, this study employs a quantitative approach which uses analysis protocols, procedures and techniques that obtain from the natural science and focuses on testing research hypotheses. This section deals with the appropriate research methods which will be used in this study. For the purpose of the research first question, a survey strategy method is employed; and for the second research question, statistical tests are used. In particular, the current thesis uses a binary logistic regression to determine the relationship between the selected independent variables and the dependent variables. A detailed explanation of the methods is provided in the next section.

5.4.1 Survey Strategy Method

This study aims to determine the extent of IFR by Arab MENA listed companies. To accomplish this objective, all the 1456 Arab MENA listed companies should be investigated; and the survey strategy method is suitable and helps achieving the first aim and answering the first question of the research. Saunders et al. (2009) reveal that survey allows the collection of a large amount of data. With regard to this thesis, the research is not attending to collect a large amount of data rather than needs to investigate all Arab MENA listed companies.

The survey will be conducted in two main steps: i) investigate whether or not a company has a web site by using the stock exchange for every single country; and if the stock exchange does not include a link address for a company web site, the search engines will be used; and ii)

investigate whether or not those companies with a web site disseminate financial reporting via their web site.

5.4.2 Statistical Tests

The second part of the current study involves numerical data to help to answer the research questions and meet the objectives. There are two types for data collection; primary data and secondary data. The primary data is collected specially about the study's topic from its main sources (Saunders et al., 2009). This type could be qualitative such as interviews; case studies; observations; or it could be quantitative such as questionnaires and surveys.

The secondary data, conversely, is not found for specific topics where it is available to any researcher and could be obtained from many sources (Saunders et al., 2009). This type of data is suitable for both descriptive and explanatory research and could be qualitative or quantitative.

Quantitative data can be divided into two distinct groups: categorical and quantifiable. Categorical data refers to data whose values cannot be measured numerically but can be either classified into groups (categories) or placed in rank order; and can be further subdivided into descriptive and ranked (Saunders et al., 2009). Quantifiable data is data that can be actually measured numerically as quantities; and can be further subdivided into a continuous variable, which can theoretically take any value, and discrete data, which can be measured precisely; and both take one of a finite number of values (Saunders et al., 2009). Both categorical and quantifiable data will be collected for the purpose of the current study.

The current study is multi-country cross-sectional study; and hence, the data will be collected regarding all Arab MENA listed companies at a specific time (2010). This study depends mainly

on Data Stream as the secondary data method to collect the data. In addition, the annual report of the listed companies will be used for the absence of data on Data Stream. Once the data was obtained from Data Stream, random samples were taken to check the validity of the obtained values. The values of random samples such as total assets; return on equity; and leverage were compared to the values that were obtained from the web sites of the same companies; and the results were identical.

After collecting the data, choosing an appropriate statistical technique is required as a next step (Bourne, 2012). Determining factors that may affect Arab MENA listed companies to adopt IFR requires knowing the relationship between specific factors (seven were chosen in this thesis) and IFR. Therefore, a statistical regression technique can be used for this purpose; however, there are many types of regressions and choosing which one depends on the type of the outcome (the dependent variable) whether it is continuous or categorical (dichotomous). Field (2009) reveals that when the dependent variable is a continuous variable, a researcher may use many types of regression (simple regression to predict an outcome variable from one explanatory variable; or multiple regressions in case of several explanatory variables); however, when the dependent variable is a categorical variable, a researcher may use a logistic regression. There are two types of logistic regression and choosing which one depends on the number of categories of the dependent variable. Field (2009) mentions that when a dependent variable has only two categories, a binary logistic regression might be used; however, when the dependent is classified into three categories, a multinomial logistic regression might be used. This study predicts the relationship between seven continuous and categorical independent variables and five dependent variables (dichotomous); thus, a binary logistic regression will be used in the current thesis.

All steps regarding collecting data, descriptive analysis, autocorrelation, and statistical regression will be discussed in detail in Chapter 6 and Chapter 7.

5.5 Summary

This chapter discusses the research design employed in the current study by outlining Burrell and Morgan's (1979) philosophy regarding different standpoints in relation to the assumptions about the nature of social science and the assumptions about the nature of society. Furthermore, the chapter discusses the research paradigms and identifies the functionalist paradigm that is adopted in this thesis. It also addresses the research methods used for the empirical work of the current study. The next chapter (6) includes the first empirical work of the study and answers the first question; Chapter 7 then contains an analysis of the data collected to determine the factors that affect Arab MENA countries to adopt IFR.

Chapter 6: Empirical Analysis of Internet Financial Reporting in Arab MENA Countries

Chapter 6

Empirical Analysis of Internet Financial Reporting in Arab MENA Countries

6.1 Introduction

The purpose of this chapter is to pursue the first aim of this study, which is to provide a snapshot of the current situation of internet financial reporting (IFR) practices by listed companies in Arab MENA countries. In addition with an institutional focus, it discusses the effect of sector, country, and region on IFR in these countries. This is achieved by investigating the IFR of the entire listed Arab MENA countries' companies in the middle of 2010 and is conducted in three steps: it first identifies the companies listed on the stock exchanges in these countries; second it establishes whether the listed companies have web sites or not; the third step determines whether the listed companies that have web sites disclose internet financial information. At the end of this chapter, a picture of IFR in Arab MENA countries will be drawn; and variation between sectors, countries, and regions can be determined; and thus, it is an essential step towards the second empirical work. The next chapter covers the second aim of the study, which is to identify the different factors that may influence listed companies to have web sites and to disseminate financial information via their web sites among different selected countries. To achieve the first aim, this chapter is organised as follows: Sections 6.2 to 6.17 describe the listed companies' internet financial reporting practices in the 16 Arab MENA countries. This will be followed by a summary across countries in Section 6.18; and finally Section 6.19 summaries the chapter.

As mentioned in chapter two there are twenty two Arab MENA countries (see Table 2.1). The first step was to identify the stock exchange web site for every country. Many popular search tools (including Google, Yahoo, Dogpile, and bing) were used to locate the homepage of the respective stock exchanges. Of the twenty two countries, only sixteen countries had a stock

exchange at the time of the study (namely Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, and United Arab Emirates). For this part of the study, data collection started during May 2010 and continued until the end of September 2010. The next sections (6.2 to 6.17) analyse the Arab MENA countries that have stock exchange web sites, arranged in alphabetical order.

6.2 Internet Financial Reporting in Algeria

Once the Algerian stock exchange, which is known as Bourse D'Alger (BDA), web site was located, the names of the listed companies were obtained. Only six companies were listed at the time of this study. There was no sector classification, but after the listed companies' activities were checked[37], the researcher classified those companies into two sectors. Five were services companies, and one company operated in the Industrial Sector as shown in Table 6.1. Of the small number of BDA listed companies, five out of six of these companies had a web site, and only one company, in the Services Sector, did not have a web site. The web sites of the five BDA listed companies were checked to find out whether they disclosed financial information; only two companies had financial information on their web sites and both of these operated in the Services Sector.

37 Bourse D'Alger's web site includes a summary that shows the history and activity of the listed companies.

Table 6.1: Web Sites and Financial Information of BDA Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Services	4	80%	1	20%	5	83%	2	50%	2	50	4	80%
Industrial	1	100%	0	0%	1	17%	0	0%	1	100%	1	20%
Total	5	83%	1	17%	6	100%	2	40%	3	60%	5	100%

Note: this table shows the BDA listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

Overall, it seems that IFR in Algeria is not well established, with only two companies having IFR. To the best of the researcher's knowledge, there have not been any previous studies in Algeria about IFR, in comparison to other Arab MENA countries, Algeria will now be compared to Bahrain, which is discussed in the next section.

6.3 Internet Financial Reporting in Bahrain

The 50 companies listed on the Bahrain Bourse (BHB) were obtained from the BHB web site; seven of these were excluded because they are either suspended companies or non-Bahraini companies. The non-Bahraini companies were excluded because they were listed in one of the other Arab MENA stock markets and have therefore been included in their domestic stock market. The BHB web site provides a hyperlink of listed companies which were used to check the individual companies' web sites. Where hyperlinks to companies were not displayed by the BHB, the abovementioned search tools were used to find out whether these companies had web sites or not. In addition to the search tools, some useful web sites such as GulfBase, Zawya, and btflive.net were used to try to find the web sites of listed companies. A distribution by industrial classification of listed companies is shown in Table 6.2 over the six main industrial sectors classified by the BHB. The table shows that of the 43 listed companies on the BHB, more than half (59%) of these companies are financial companies (commercial banks, investment, and insurance); this is not surprising as Bahrain is one of the world's leading international finance centres (Desoky and Mousa, 2009). The Services Sector is about 20% of all companies; and the remainder operate in either the industrial or hotel and tourism sectors.

Table 6.2: Web Sites and Financial Information of BHB Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	8	100%	0	0%	8	19%	8	100%	0	0%	8	22%
Investment	12	100%	0	0%	12	28%	12	100%	0	0%	12	32%
Insurance	5	100%	0	0%	5	12%	5	100%	0	0%	5	13%
Services	8	89%	1	11%	9	20%	7	88%	1	12%	8	22%
Hotels & Tourism	3	60%	2	40%	5	12%	3	100%	0	0%	3	8%
Industrial	1	25%	3	75%	4	9%	1	100%	0	0%	1	3%
Total	37	86%	6	14%	43	100%	36	97%	1	3%	37	100%

Note: this table shows the BHB listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

Table 6.2 also shows that 37 (86%) of BHB listed companies have web sites. This compares with a rate of 79% in Mohamed and Oyelere's (2008) study. The table indicates that all companies (100%) in the Financial Sector have web sites. This compares favourably with companies in the Industrial Sector where only one of the four companies (25%) in this sector has a web site; for the Services Sector 89% of the companies have web sites (eight out of nine).

Regarding IFR, of the 37 BHB listed companies' web sites checked, all but one company disseminated financial information via their web sites. Each company's homepage design differs from one company to another so it was easy to find and locate financial information for some companies, but it was hard to find this information for other companies. Mohamed and Oyelere (2008) reported in their study that all the BHB listed companies with web sites "…provide a variety of information on their sites. These include company history, product, financial and other information" (P: 40-41). Their result is consistent with this study except for one company, a media business (Bahrain Cinema Company) in the Services Sector; which is concerned with marketing to its customers rather than to investors. This company was included in Mohamed and Oyelere's (2008) study; however, the difference between both studies is that this study considers only the financial information disclosure whereas Mohamed and Oyelere (2008) investigate other types of disclosure such as company history. Bahrain is one of the Gulf Cooperation Council (GCC) countries and it has political and economic significance as an oil producer that is of importance to western world economies. Despite the fact that IFR in Bahrain is voluntary and unregulated, the Bahraini Corporate Governance Code (BCGC) recommends that all operating joint stock companies have web sites and dedicate a specific section of their web sites for shareholders' rights and provide key documents such as financial statement that are useful to shareholders:

> A company should maintain a company web site. The company should dedicate a specific section of its web site to describing shareholders' rights to participate and vote at each shareholder's meeting, and should post significant documents relating to meetings including the full of notices and minutes (Minister of Industry and Commerce, 2010; P: 36).

In comparison to Algeria, where IFR is also voluntary and unregulated, Bahraini listed companies seem to be well established with most companies having IFR on their web sites. The next section discusses internet financial reporting in Egypt.

6.4 Internet Financial Reporting in Egypt

To determine current IFR practices in Egypt, the Egyptian Exchange (EGX) listed companies were checked. Unlike the homepage of the BHB, which includes hyperlinks for most listed companies, the EGX did not include any hyperlinks for listed companies at the time of this study. In addition, it has a far large number of listed companies than the BDA or BHB, with 218 listed companies across different sectors, as shown in Table 6.3. To find out whether EGX listed companies had web sites or not, the above mentioned search tools were used. In addition, it was very helpful to use the Mubasher.info web site which provides information and reports about EGX listed companies; in addition, it provides hyperlinks for many listed EGX companies that have web sites.

Table 6.3: Web Sites and Financial Information of EGX Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	12	92%	1	8%	13	6%	11	92%	1	8%	12	8%
Financial Services (Excluding banks)	22	67%	11	33%	33	16%	17	77%	5	23%	22	14%
Basic Recourses and Utilities	8	80%	2	20%	10	5%	5	63%	3	37%	8	5%
Chemicals and Oil and Gas	10	100%	0	0%	10	5%	6	60%	4	40%	10	6%
Constructions and Materials	20	74%	7	26%	27	12%	13	65%	7	35%	20	13%
Food and Beverage	20	71%	8	29%	28	13%	8	40%	12	60%	20	13%
Healthcare and Pharmaceuticals	7	54%	6	46%	13	6%	3	43%	4	57%	7	5%
Industrial Goods and Services and Automobiles	14	78%	4	22%	18	8%	9	64%	5	36%	14	9%
Personal and Household Products	7	64%	4	36%	11	5%	6	86%	1	14%	7	5%
Real Estate	15	56%	12	44%	27	12%	9	60%	6	40%	15	10%
Retail	3	60%	2	40%	5	2%	2	67%	1	33%	3	2%
Media, Technology, and Telecommunications	6	86%	1	14%	7	3%	5	83%	1	17%	6	4%
Travel & Leisure	10	63%	6	37%	16	7%	4	40%	6	60%	10	6%
Total	154	71%	64	29%	218	100%	98	64%	56	36%	154	100%

Note: this table shows the EGX listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

The EGX listed companies are classified into 17 sectors; however, because some only had one or two companies, the researcher merged them in to 13 sectors[38]. Table 6.3 shows that 21% of the EGX listed companies operate in the Financial Sector; followed by Food and Beverage (13%), Constructions and Materials, and the Real Estate Sectors with 12% each. Where a company's hyperlink was available, through Mubasher.info, or by the other search tools, it was checked first to make sure that the web site was accessible; seventeen companies with hyperlinks had inaccessible web sites. It can be seen from Table 6.3 that 154 (71%) of the EGX listed companies had web sites whereas 64 (29%) did not. Ezat (2008) reported that 225[39] (52%) of the EGX listed companies in his study in 2007 had web sites. Comparing the findings of this study to Ezat (2008), there has been an increase in the number of EGX listed companies that possess web sites. The table indicates that 34 out of 46 (74%) of EGX listed companies in the Financial Sector had web sites. The rate of the EGX listed companies that have web sites ranges from 54% in Healthcare and Pharmaceuticals Sector to 100% in Chemicals and Oil and Gas sector.

Further investigations reveal that of the 154 EGX listed companies that have accessible web sites, 98 (64%) companies disseminate financial information via their web sites as shown in Table 6.3. This compares with Ezat (2008) who found that only 36% of EGX listed companies in 2007 disseminated financial information; this indicates a large increase in IFR in Egypt even though IFR is still voluntary and unregulated as at the time of this study. Interestingly, the Egyptian Financial Supervisory Authority (EFSA) in its regulatory framework states that listed

[38] The sectors were merged as follows showing the number: Utilities Sector (1 company) with the Basic Recourses Sector (9 companies); the Oil and Gas Sector (3 companies) with Chemicals Sector (7 companies); and Technology Sector (3 companies), Telecommunications Sector (3 companies) with Media Sector (1 company).

[39] The number of listed companies (432) in Ezat's (2008) study was higher.

companies will be required by March 2013 to maintain a web site and disseminate their annual and periodical financial statements on their web sites[40] as noted below:

> "By end of March 2013, listed companies shall adjust its positions and launch its web sites in order to publish its annual and periodical financial statements with the explanatory statement as well as the auditors' reports and other data and information defined by the Egyptian Exchange and the companies have to inform the Exchange of pursuant to listing rules, without prejudice to disclosure requirements stated in listing and delisting rules".[41] (EFSA, 2012; Decision: 15; Article: 2).

Table 6.3 also shows that different sectors have different levels of IFR ranging from 40 % to 92% which indicates the effect of the sector on IFR. Overall, 71% of the EGX listed companies have a web site and, of these, 64% disseminate financial information. This compares to Bahrain with 86% of listed companies having web sites and, of these, 97% present financial information on their web sites. However, the EGX is larger than the BHB and has more sectors. A similar point between the two stock exchanges is that both have a separate Financial Sector. The Financial Sector in Bahrain is the largest sector on the BHB (59%); whereas only 22 % of EGX companies operate in this sector. Moreover, all companies (100%) in the Financial Sector in Bahrain post financial information via their web sites whereas only 82% of the EGX listed companies in the Financial Sector use their web sites for IFR. These differences between these two countries indicate a possible country effect on IFR. The next section discusses internet financial reporting in Iraq.

40. Future research could be developed to investigate the impact of the EFSA regulation on IFR in Egypt.
41. For more information see Appendix 6.1.

6.5 Internet Financial Reporting in Iraq

Iraqi Stock Exchange (ISX) listed companies were obtained from the ISX homepage and in 2010 there were 85[42] companies classified into seven sectors, as shown in Table 6.4. In addition to the above mentioned search engine tools, some helpful web sites (such as: Iraqi Depository Centre and Iraq Securities Commission) were used. Table 6.4 shows that in terms of the number of companies listed, the ISX has more than the Algerian Stock Exchange (six listed companies) and Bahraini Stock Exchange (43 listed companies) and less than Egyptian Stock Exchange (218 listed companies). Table 6.4 also indicates that more than a quarter (29%) of ISX companies are industrial companies, a far higher proportion than in the other three countries. The Financial Sector (Banks, Investment, and Insurance) represents about 40% of the ISX listed companies. This compares to the Financial Sector in Egypt (22%) and in Bahrain (59%). The other three sectors (services, tourism and hotels, and agriculture) make up the rest of the ISX listed companies (31%). The Agriculture Sector distinguishes the ISX classification from the previous countries as they do not include this as a sector in their classification. The table shows that less than half (34%) of ISX listed companies have web sites. However, this compares with a rate of 71% for the EGX listed companies, 83% for the BDA listed companies, and 86% for the BHB listed companies; this large difference may be due to the country effect and that the Iraqi economy was centrally planned[43] and has had an unstable political situation since the end of the President Saddam Hussein's rule. Table 6.4 also shows that 22 out of 34 (65%) of the ISX listed companies in the Financial Sector have web sites; this is low compared to the Financial Sector in Egypt (74%) and BHB (100%). However, the Financial Sector in ISX is by far the best[44]

[42.] The total number is 86 listed companies; however, one company was excluded because it was a Bahraini bank listed on both Bahrain Stock Exchange and Iraqi Stock Exchange.

[43.] Centrally planned economy is an economic system in which economic decisions are made by the state or government rather than by the interaction between consumers and businesses.

[44] Best refers to the highest proportion of listed companies with IFR.

among the other sectors in Iraq, indicating a possible sector effect on a company to possess a web site. The other sectors have a very low rate of web sites ranging from 0% in the Agriculture Sector to 20% in the Industrial Sector. An inspection of Table 6.4 shows that there is very little IFR in Iraq; only 11 out of 29 (38%) ISX listed companies that have web sites present financial information; all these 11 companies operate in the Financial Sector; namely Banks (ten companies) and Investment (one company). Here again, the Financial Sector appears to have an effect on IFR. However, even though the Financial Sector in ISX is better[45] than the other sectors for IFR, it is not so compared to the Financial Sector in EGX (82%) and BHB (100%) which also indicates a country effect. To the best of researcher's knowledge, there have not been any previous studies on IFR in Iraq. Internet financial reporting in Jordan is discussed in the next section.

[45] Better refers to a higher proportion of listed companies with IFR.

Table 6.4: Web Sites and Financial Information of ISX Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	20	100%	0	0%	20	24%	10	50%	10	50%	20	70%
Insurance	1	20%	4	80%	5	6%	0	0%	1	100%	1	3%
Investment	1	11%	8	89%	9	10%	1	100%	0	0%	1	3%
Services	1	10%	9	90%	10	12%	0	0%	1	100%	1	3%
Industry	5	20%	20	80%	25	29%	0	0%	5	100%	5	18%
Tourism and Hotels	1	10%	9	90%	10	12%	0	0%	1	100%	1	3%
Agriculture	0	0%	6	100%	6	7%	-	-	-	-	-	-
Total	29	34%	56	66%	85	100%	11	38%	18	62%	29	100%

Note: this table shows the ISX listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

6.6 Internet Financial Reporting in Jordan

By checking the homepage of Amman Stock Exchange (ASE), it was found that there were 275 listed companies in 2010. These companies are classified into three main sectors as shown in Table 6.5. However these three sectors have subcategories; the Financial Sector (Banks, Insurance, Diversified Financial Services, and Real Estate); the Services Sector (Health Care Services, Educational Services, Hotels and Tourism, Transportation, Technology and Communication, Media, Utilities and Energy, and Commercial Services), and the Industrial Sector (Pharmaceutical and Medical Industries, Chemical Industries, Paper and Cardboard Industries, Printing and Packaging, Food and Beverages, Tobacco and Cigarettes, Mining and Extraction Industries, Engineering and Construction, Electrical Industries, Textiles- leathers and Clothing, and Glass and Ceramic Industries).

As mentioned above, the ASE classifies real estate companies within the Financial Sector; thus, for comparison purposes in this research, real estate companies were excluded from the Financial Sector and added to the Services Sector. Table 6.5 indicates that 103 (38%) companies operate in the Services Sector; then 94 (34%) companies operate in the Industrial Sector. This is followed by 78 (28%) companies operate in the Financial Sector. This compares to Bahrain where the rate (59%) of listed companies in the Financial Sector is much higher and Iraq (40%), but it is similar to Egypt (22%).

Regarding possessing a web site, Table 6.5 shows that almost half (49%) of the ASE listed companies have web sites. This compares with a rate of 45% for ASE listed companies in Momany and Al-Shormans' (2006) study. However, Momany and Shormans' (2006) study only included 60 companies listed on the first market of ASE, whereas this study includes all ASE

listed companies. The table shows that the Financial Sector has the highest rate (69%) compared to the other sectors of listed companies that have web sites. It is worth mentioning that all Jordanian listed banks (100%) have web sites. Moreover, it shows that of the 94 companies in the Industrial Sector, only 39 (41%) companies have web sites; this compares with 55% in 2006 (Al-Hayale, 2010). Al-Hayale's (2010) study included 91 industrial companies listed on ASE. Table 6.5 also shows that almost half (48%) of the companies that have web sites present financial information via their web sites. Jordan thus lies between Algeria and Egypt of the previous countries of this thesis (Algeria (40%), Bahrain (97%), Egypt (64%), and Iraq (38%)).

This compares with a rate of 70% for ASE listed companies in Momany and Al-Shormans' (2006) study; this might be because of the difference between this study's sample and Momany and Al-Shormans' (2006) study's sample which only included the ASE listed companies on the First Market unlike this study which includes both the First and the Second Market.

Regarding IFR by sectors, the table shows that the Financial Sector (78%) is the best among the other sectors in ASE with all banks (100%) disseminating financial information; the other sectors have a lower rate of 32% or less. Even though the Financial Sector is the best, it is still less than the Financial Sector in Bahrain (100%) and Egypt (82%), but better than the Financial Sector in Iraq (50%). These findings reveal that IFR in Jordanian listed companies is not well established with less than half of companies with web sites presenting financial information on their web sites. Internet financial reporting in Kuwait is discussed next.

Table 6.5: Web Sites and Financial Information of ASE Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Financial	54	69%	24	31%	78	28%	42	78%	12	22%	54	40%
Services	41	40%	62	60%	103	38%	13	32%	28	68%	41	31%
Industrial	39	41%	55	59%	94	34%	9	23%	30	77%	39	29%
Total	134	49%	141	51%	275	100%	64	48%	70	52%	134	100%

Note: this table shows the ASE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

6.7 Internet Financial Reporting in Kuwait

The Kuwaiti Stock Exchange (KSE) has 232 listed companies as obtained from the KSE homepage; 14 of which were excluded from this study to give a final number of 218 companies[46]. Where companies have web sites, web sites' links were drawn from three sources: (i) companies' profiles on the KSE; (ii) specialised web sites such as GulfBase, Zawya, and btflive.net; and (iii) other search engine tools. Table 6.6 breaks down the KSE listed companies that have web sites by their sector classification; and shows that the Financial Sector (Banking, Investment, and Insurance) is the largest (32%) and then Services Sector represents more than a quarter (29%) of the KSE listed companies; followed by real estate (21%); and the other sectors (Industrial and Food) are 15% or less each. Even though the Financial Sector is the largest, it is still smaller than the Financial Sector in Bahrain (59%) and in Iraq (40%), but higher than Jordan (28%) and Egypt (21%). The table also shows that 189 out of 218 (87%) of KSE listed companies have web sites. This compares with a rate of 77% in 2005 (Al-Shammari, 2007). The table indicates that all companies (100%) that operate in Banking, Insurance, and Food Sectors have web sites; in addition, it indicates that at least 80% of the KSE listed companies in each sector have web sites. Comparing these findings to previous countries, Kuwait is closer to Bahrain (86%) with higher rate of companies that have web sites than Egypt (71%), Jordan (49%), and Iraq (34%). The reason that Kuwait and Bahrain are similar may due to the fact that both are GCC countries and share the same culture indicating a possible country/ region influence on IFR.

[46]. The reason that those companies were excluded is that these companies are listed in other Arab MENA countries' stock exchanges.

Table 6.6: Web Sites and Financial Information of KSE Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banking	9	100%	0	0%	9	4%	9	100%	0	0%	9	5%
Investment	51	93%	4	7%	55	25%	44	86%	7	14%	51	27%
Insurance	7	100%	0	0%	7	3%	7	100%	0	14%	7	4%
Real Estate	38	83%	8	17%	46	21%	31	82%	7	18%	38	20%
Industrial	24	80%	6	20%	30	15%	16	67%	8	33%	24	12%
Services	53	83%	11	17%	64	29%	37	70%	16	30%	53	28%
Food	7	100%	0	0%	7	3%	2	29%	5	71%	7	4%
Total	189	87%	29	13%	218	100%	146	77%	43	23%	189	100%

Note: this table shows the KSE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

Table 6.6 also indicates that 146 out of 189 (77%) of the KSE listed companies posted financial information on their web sites. This compares with a rate of 56% in 2007 (Alanezi, 2009) and shows a sizable increase of the number of the KSE listed companies that post financial information via their web sites. Repeating the pattern of other countries, the table shows that all banks and insurance companies (100%) present their financial information on their web sites. This is followed by the Investment Sector (86%), Real Estate Sector (82%), Services Sector (70%), and Industrial Sector (67%); and only two out of seven (29%) companies in the Food Sector presented their financial information via their web sites; however, this compares to Alanezi's (2009) study that showed no food companies did so. The existence differences between findings of this study and Alanezi's (2009) study may due to the fact that the sample size in both studies are different; the number of listed companies at the Alanezi's study time was 179 companies whereas the number of listed companies at the time of this study is 218. Furthermore, a period of three years between the time of this study and Alanezi's study is enough period in which companies within one Industrial Sector would not like to be different form their competitive companies; thus, they may copy each other. For instance, the number of investment companies engaging in IFR in 2007 is 31 companies, whereas in 2010 is 44 companies.

Overall, it seems that IFR in Kuwait is well established with more than three quarters of KSE listed companies with web sites presenting financial information on their web sites. The next section discusses internet financial reporting in Lebanon.

6.8 Internet Financial Reporting in Lebanon

The stock exchange in Lebanon is named the Beirut Stock Exchange (BSE); it is a small stock exchange with just ten listed companies and is more comparable to Algeria with six companies. All the BSE listed companies were checked and found that most of them have web sites as shown in Table 6.7; more than half (60%) of BSE listed companies are banks and 90% have web sites. To the best of the researcher's knowledge, there have not been any previous studies on internet financial reporting in Lebanon. The table also indicates that all listed Banks (100%) have web sites; these findings are in line with Bahrain (100%), Jordan (100%), and Kuwait (100%). All the nine companies that have web sites were checked and found that they utilised their web sites for financial information disclosure except for one trading company, which operates in car trading; this company may be concerned with marketing their cars to its customers rather than investors. Overall, the findings of this study indicate that Lebanon is similar to Algeria in size and seems to be well established compared to Algeria; however, the number of listed companies in Lebanon is very small compares to Jordan (275), Egypt (218), and Kuwait (218). The next section discusses internet financial reporting in Libya.

Table 6.7: Web Sites and Financial Information of BSE Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	6	100%	0	0%	6	60%	6	100%	0	0%	6	67%
Industrial	1	50%	1	50%	2	20%	1	100%	0	0%	1	11%
Trading	1	100%	0	0%	1	10%	0	0%	1	100%	1	11%
Real Estate & Construction	1	100%	0	100%	1	10%	1	100%	0	0%	1	11%
Total	9	90%	1	10%	10	100%	8	89%	1	11%	9	100%

Note: this table shows the BSE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

6.9 Internet Financial Reporting in Libya

As mentioned in Chapter 2 the Libyan Stock Market (LSM) was only recently founded and it is not a large market with only ten companies distributed across four sectors similar to Lebanon as shown in Table 6.8.

The table shows that 80% of the LSM listed companies are in the Financial Sector; in particular, half of the LSM listed companies are banks; every LSM listed company has a web site even though they are not required to maintain a web site by any law in the country. To the best of the researcher's knowledge, there have not been any previous studies on IFR in Libya. After the ten LSM listed companies were checked, it was found that six companies had IFR as shown in Table 6.8. In particular, one insurance company and all of the LSM listed banks disseminate financial information on their web sites, in line with other countries. One possible reason could be that banks and insurance companies are under normative pressure because of the nature of their business that requires them to involve in international operations such as foreign exchange contracts.

Even though all Libyan listed companies have web sites and more than half of which post financial information on their web sites, IFR in Libya still in early stages (see Chapter 2). This may be due to the absence of laws and the chaos that was experienced by the country during the reign of Muammar Gaddafi. The next section discusses IFR in Morocco.

Table 6.8: Web Sites and Financial Information of LSM Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	5	100%	0	0%	5	50%	5	100%	0	0%	5	50%
Insurance	3	100%	0	0%	3	30%	1	33%	2	67%	3	30%
Industrial	1	100%	0	0%	1	10%	0	0%	1	100%	1	10%
Tourism & Investment	1	100%	0	0%	1	10%	0	0%	1	100%	1	10%
Total	10	100%	0	0%	10	100%	6	60%	4	40%	10	100%

Note: this table shows the LSM listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

6.10 Internet Financial Reporting in Morocco

The stock exchange in Morocco is known as the Casablanca Stock Exchange (CSE); it is also known Bourse de Casablanca. The number of CSE listed companies in 2010 was 75. Unlike the previous countries, the CSE classifies companies in to 21 sectors; however this includes six sectors listed separately on the stock market that have only one company each; therefore, the researcher collapsed them down into 16 sectors as shown in Table 6.9; and this similar to Egypt (17 sectors). It seems that North African countries tend to have more sectors in their stock exchange classifications than the Middle Eastern countries with seven sectors each in Iraq and Kuwait, four sectors in Lebanon, and three sectors in Jordan.

Table 6.9 shows that the Distribution Sector is the largest (12%), followed by investment companies and other finance (11%) and all the other sectors are less than 11%. However, it can be said that the Financial Sector is largest (23%), when banks are added to insurance and investment companies and other finance. The table indicates that 84% of CSE listed companies have a web site; to the best of researcher's knowledge, there have not been any previous studies about internet financial reporting practices in Morocco. This rate compares to other Arab MENA countries such as Bahrain (86%), and Kuwait (87%). The table shows that at least 50% of CSE listed companies in each sector, except the Forestry and Paper Sector which is 0%, have web sites. In general, 94% of companies in the Financial Sector have web sites; and 100% of Banks have web sites; this compares to Bahrain, Jordan, Kuwait, Lebanon, and Libya (100% each). The reason that the Financial Sector in Arab MENA countries used for comparison is that all these countries have banks in their sector classifications; other sectors may exist in one country's classification but not in other countries.

Table 6.9: Web Sites and Financial Information of CSE Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	6	100%	0	0%	6	8%	6	100%	0	0%	6	10%
Insurance	2	67%	1	33%	3	4%	1	50%	1	50%	2	3%
Investment Companies & other Finance	8	100%	0	0%	8	11%	1	13%	7	87%	8	13%
Food Producers & Processors	5	83%	1	17%	6	8%	4	80%	1	20%	5	8%
Construction & Building Materials	6	100%	0	0%	6	8%	4	67%	2	33%	6	10%
Beverages	2	67%	1	33%	3	4%	2	100%	0	0%	2	3%
Chemicals	3	75%	1	25%	4	5%	1	33%	2	67%	3	5%
Distributors	6	67%	3	33%	9	12%	4	67%	2	33%	6	10%
Real Estate	3	75%	1	25%	4	5%	2	67%	1	33%	3	5%
Pharmaceutical Industry	1	50%	1	50%	2	3%	0	0%	1	100%	1	2%
Materials, Software & Computer Services	6	100%	0	0%	6	8%	3	50%	3	50%	6	10%
Mining	3	75%	1	25%	4	5%	3	100%	0	0%	3	5%
Oil & Gas	2	100%	0	0%	2	3%	1	50%	1	50%	2	3%
Holding Companies	3	75%	1	25%	4	5%	3	100%	0	0%	3	5%
Transport	2	100%	0	0%	2	3%	1	50%	1	50%	2	3%
Others*	5	83%	1**	17%	6	8%	3	60%	2	40%	5	8%
Total	63	84%	12	16%	75	100%	39	62%	24	38%	63	100%

Note: this table shows the CSE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification. *This sector includes: Electrical & Electronic Equipment, Engineering & Equipment Industrial Goods, Leisure and Hotels, Utilities, Forestry & Paper, and Telecommunications. ** The only company that does not have a web site operates in the Forestry & Paper Sector.

Table 6.9 also shows that 62% of the CSE listed companies that have web sites present financial information. This compares to a rate of 64% in Egypt, and 60% in Libya which are located in the same region as Morocco (North Africa); whereas the rate is higher in the other regions (Middle East) such as Bahrain (97%), Lebanon (89%), and Kuwait (77%). On the other hand, the table shows that all banks (100%) disseminate financial information via their web sites; this finding is in line with previous countries and emphasises the effect of this sector on IFR. Accordingly, sector, country, and also region may be important and may explain the variations in IFR among Arab MENA countries. The Moroccan Code of Good Corporate Governance Practices (MCGCGP) mentions in part III-5 (Information dissemination method and user access to information) that a company shall use the internet as a tool for financial communication:

> "The enterprise shall use the internet as a complementary information dissemination mechanism (MCGCGP, 2008; p: 24)"

The overall IFR practice in Morocco is that 62% of CSE listed companies that have web sites disseminate financial information via their web sites. The internet financial reporting practice in Oman is discussed in the next section.

6.11 Internet Financial Reporting in Oman

The list of companies on the Muscat Securities Market (MSM) was obtained from the MSM homepage with 114 listed companies in 2010. Similar to Amman Stock Exchange classification, the MSM classifies listed companies into only three sectors, as shown in Table 6.10. The table indicates that the Industrial Sector is the largest sector (41%) among the three sectors and then Services Sector (34%). The Financial Sector (25%) differs from previous GCC countries (Bahrain (59%), and Kuwait (33%)) as the Financial Sector is much smaller. The table also shows that 99 companies (87%) of MSM listed companies have web sites. This compares with

a rate of 59% for MSM listed companies in Mohamed et al.'s (2009) study. Like the Financial Sector in previous countries, the MSM listed companies in Financial Sector[47] have the highest percentage (93%) of web sites among the three sectors. The 99 companies' web sites were checked and it was found that 67% of MSM listed companies that have web sites utilise their web sites for disclosing financial information[48]; this rate is low compared to Bahrain (97%), Lebanon (89%), and Kuwait (77%); however, it is still higher than the North African countries in the region such as Egypt (64%), Morocco (62%), Libya (60%), and Algeria (40%). The 33% of MSM listed companies that have web sites but do not disclose financial information on their web sites contravenes best practice as recommended in article 18 of Corporate Governance Code for MSM listed companies:

> "… Information like quarterly results and presentation made by company to analysts shall be put on the company's web site or may be sent to MSM in such a format so as enable it to put on its own web site" (Capital Market Authority, 2003; Article 18).

Even though Article 18 refers to a company's web site, that does not mean IFR in Oman is mandatory; it is still voluntary and unregulated, however, there has been an increase in companies having IFR on their web sites compared to 2006 (Mohamed et al., 2009). Moreover, the findings of this study that all banks listed on the MSM have web sites and present financial information provide strong evidence of the effect of the Financial Sector on IFR. The next section discusses IFR in Palestine.

47. The Financial Sector includes six banks which all (100%) have web sites.
48. It also was found that all banks (100%) disclose financial information on their web sites.

Table 6.10: Web Sites and Financial Information of MSM Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Financial	27	93%	2	7%	29	25%	24	89%	3	11%	27	27%
Industrial	39	83%	8	17%	47	41%	22	56%	17	44%	39	39%
Services	33	87%	5	13%	38	34%	20	61%	13	39%	33	34%
Total	99	87%	15	13%	114	100%	66	67%	33	33%	99	100%

Note: this table shows the MSM listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

6.12 Internet Financial Reporting in Palestine

There are 40 listed companies on the Palestine Exchange[49] (PEX) classified into 5 sectors. All the 40 companies were investigated for having web sites, as shown in Table 6.11. The table indicates that the number of the PE listed companies is not large compared to Jordan (275 companies) and not too small compared to Algeria (6 companies); it is close to the number of listed companies in Bahrain (43). The table shows that half (50%) of the PE listed companies are financial companies and the other half are services companies (25%) and industrial companies (25%). The table also indicates that 73% of the PE listed companies have web sites. To the best of the researcher's knowledge, there have not been any previous studies on IFR in Palestine. These findings for Palestine are in line with previous countries where the Financial Sector has most companies with web sites; this emphasises the effect of the sector; indeed, 100% of the PE listed banks have web sites. All the listed companies that have web sites were checked and it was found that 69% disseminated financial information via their web sites; this compares to Oman (67%), and Egypt (64%).

Table 6.11 also indicates that most banks (86%) disseminate financial information via their web sites; and overall, 75% of the PE listed companies in the Financial Sector use their web sites for disclosure purposes. The table also shows that IFR in the other sectors is 50% and above which means that IFR in Palestine is well established even though Palestine is located in an unstable area. IFR in Qatar is discussed in the next section.

[49.] As mentioned in Chapter 2, the stock market in Palestine is called the Palestine Exchange.

Table 6.11: Web Sites and Financial Information of PEX Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	7	100%	0	0%	7	17%	6	86%	1	14%	7	24%
Investment	5	63%	3	37%	8	20%	3	60%	2	40%	5	17%
Insurance	4	80%	1	20%	5	13%	3	75%	1	25%	4	14%
Services	6	60%	4	40%	10	25%	3	50%	3	50%	6	21%
Industrial	7	70%	3	30%	10	25%	5	71%	2	29%	7	24%
Total	29	73%	11	27%	40	100%	20	69%	9	31%	29	100%

Note: this table shows the PE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

6.13 Internet Financial Reporting in Qatar

The list of listed companies on the Qatar Exchange[50] (QE) was obtained from the QE home page; there were 42 companies listed on the QE. These companies are from three main industrial sectors as shown in Table 6.12 emphasising the regional effect of sector whereby Middle East countries tend to have fewer sectors than North Africa countries. All the listed companies were investigated to find out whether they have web sites; and whether they disseminate financial information. Table 6.12 shows that half of the QE listed companies are in the Services Sector; and that most of the QE listed companies (98%) have web sites. This compares with a rate of 91% for the QE listed companies in Al-Moghaiwli's (2009) study, conducted in 2008. The number of listed companies (43) in Al-Moghaiwli's (2009) is similar to the number of the listed companies in this study; thus, one possible reason could interpret this increase is the indirect pressure on these companies where the QE recommends the listed companies to have web sites (translation of the corporate governance code for companies listed in markets regulated by the Qatar financial markets authority, 2009).

Table 6.12 also shows that the majority (88%) of QE listed companies that have web sites are engaged in IFR. The table indicates that all companies (100%) in both Banks and Insurance Sectors (Financial Sector) use their web sites to disseminate financial information; this compares to Bahrain, Jordan, Kuwait, Lebanon, Libya and Morocco (100% each). In contrast, 71% of companies in the Industrial Sector and 85% of companies in the Services Sector are engaged in IFR; and again, this emphasises the effect of banks in particular and shows that the Financial Sector is the best among the other sectors.

[50.] As mentioned in Chapter 2, the stock market in Qatar is called the Qatar Exchange.

Table 6.12: Web Sites and Financial Information of QE Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	9	100%	0	0%	9	21%	9	100%	0	0%	9	22%
Insurance	5	100%	0	0%	5	12%	5	100%	0	0%	5	12%
Industrial	7	100%	0	0%	7	17%	5	71%	2	29%	7	17%
Services	20	95%	1	5%	21	50%	17	85%	3	15%	20	49%
Total	41	98%	1	2%	42	100%	36	88%	5	12%	41	100%

Note: this table shows the QE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

This is comparable to Bahrain but slightly more Bahraini companies make use of the internet for disseminating their financial information than Qatari companies. However, these findings show an increase of using the internet by QE listed companies for financial disclosure purposes; this an increase can be seen when compare these finding to Al-Moghaiwli's (2009) findings which indicate that 72% of QE listed post their financial information on the internet. This increase may be due to the pressure that the QE has imposed in its current recommendations of Article 23- Access to Information in the Translation of the Corporate Governance Code for Companies listed in Markets Regulated by the Qatar Financial Markets Authority:

> "The company shall have a web site where all relevant information and public information and disclosures must be posted. This includes all information that is required to be made public by this Code and any related laws and regulations" (Qatar Financial Market Authority, 2009; P: 30).

Generally, IFR in Qatar seems to be well established with most QE listed companies having web sites and most presenting financial information on their web sites, in common with the other Middle Eastern countries. Another Middle Eastern country, Saudi Arabia is discussed in the next section.

6.14 Internet Financial Reporting in Saudi Arabia

As mentioned in Chapter 2, the Saudi Stock Exchange is known as the Tadawul; the home page of the Tadawul showed that 140 companies were listed in 2010. The Tadawul web site includes the links of the web sites for most listed companies. Table 6.13 displays the Tadawul listed companies that have web sites and financial information distributed by sector. It shows that Tadawul breaks down listed companies into 15 sectors with the Financial Sector as the largest (43%); and that 97% of Tadawul listed companies have web sites. Only 4 listed companies were found without a web site; 2 agriculture companies, 1 industrial company, and 1 investment

company. The findings of this study compares to the 79% of Khan et al.'s (2007) study, which was conducted in 2005, and the 84% of Al-Motrafi's (2008) study, which was conducted in 2006. It seems that the percentage of companies having web sites has increased compared to previous studies in Saudi Arabia; this may due to the Capital Market Authority's (CMA) listing requirements on shareholders rights in Article 5- C:

> "Date, place, and agenda of the General Assembly shall be specified and announced by a notice, at least 20 days prior to the date the meeting; invitation for the meeting shall be published in the Exchange's website, the company's website and in two newspapers of voluminous distribution in the Kingdom. Modern high tech means shall be used in communicating with shareholders" (CMA, 2006, PP: 5-6).

This section of Article 5 refers to a company web site that can be used as an announcement means to the shareholders but with no mention for using it as a tool for disclosing financial information; but it can be interpreted that all listed companies should have a web site.

Comparing the findings of Saudi Arabia to the previous countries, it can be seen that Saudi Arabia comes in third position after Libya where 100% of LSM listed companies have web sites, and Qatar where 98% of the QE listed companies have web sites. The Tadawul listed companies that have web sites were checked and it was found that 92 out of 136 (68%) companies with web sites posted financial information on their web sites.

Table 6.13: Web Sites and Financial Information of Tadawul Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	11	100%	0	0%	11	8%	11	100%	0	0%	11	8%
Insurance	28	100%	0	0%	28	20%	16	57%	12	43%	28	21%
Multi-Investment	6	86%	1	14%	7	5%	4	67%	2	33%	6	4%
Industrial Investment	12	92%	1	8%	13	9%	4	33%	8	67%	12	9%
Energy and Utilities	2	100%	0	0%	2	1%	2	100%	0	0%	2	1%
Agriculture	13	87%	2	13%	15	11%	10	77%	3	23%	13	10%
Telecommunication	4	100%	0	0%	4	3%	3	75%	1	25%	4	3%
Cement	8	100%	0	0%	8	6%	6	75%	2	25%	8	6%
Retail	9	100%	0	0%	9	7%	5	56%	4	44%	9	7%
Building and Construction	13	100%	0	0%	13	9%	8	62%	5	38%	13	10%
Petrochemical Industries	14	100%	0	0%	14	10%	13	93%	1	7%	14	10%
Real Estate Development	7	100%	0	0%	7	5%	5	71%	2	29%	7	5%
Transport	4	100%	0	0%	4	3%	1	25%	3	75%	4	3%
Media and Publishing	3	100%	0	0%	3	2%	3	100%	0	0%	3	2%
Hotel and Tourism	2	100%	0	0%	2	1%	1	50%	1	50%	2	1%
Total	136	97%	4	3%	140	100%	92	68%	44	32%	136	100%

Note: this table shows the Tadawul listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

The results in table 6.13 reveal that 100% of companies in Banks, Energy and Utilities, and Media and Publishing Sectors had IFR. IFR in Saudi Arabia has increased compared to Khan et al.'s (2007) study (59%), and to Al-Motrafi's (2008) Study (54%). Compared to the other Arab MENA countries in this study, while Saudi Arabia has a high percentage of listed companies with web sites, it only has a medium percentage of listed companies with IFR; for instance, Bahrain (97%), Lebanon (89%), and Qatar (88%). At present, IFR in Saudi Arabia is voluntary and unregulated; however, companies are obliged to maintain a web site (CMA, 2006); but the web site content is largely discretionary. However, IFR in Saudi Arabia is more established compared to North African countries. The IFR practice in Syria, which is another Middle Eastern country, is the next section.

6.15 Internet Financial Reporting in Syria

The number of listed companies on the Damascus Securities Exchange (DSE) in 2010 was 18 companies classified into 5 sectors as shown in Table 6.14. The companies' web sites links, for most of the listed companies, were obtained from the DSE home page. Where there was not a company link, search tools were used; in addition, a special engine search tool for Syria, called searchinsyria.com, was used. Table 6.14 reveals that more than half (78%) of the DSE listed companies operate in the Financial Sector; and 89% have web sites. To the best of the researcher's knowledge, there have not been any previous studies on IFR in Syria.

Table 6.14: Web Sites and Financial Information of DSE Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	10	100%	0	0%	10	56%	10	100%	0	0%	10	63%
Insurance	4	100%	0	0%	4	22%	3	75%	1	25%	4	25%
Services	2	100%	0	0%	2	10%	2	100%	0	0%	2	12%
Industrial	0	0%	1	100%	1	6%	-	-	-	-	-	-
Agriculture	0	0%	1	100%	1	6%	-	-	-	-	-	-
Total	16	89%	2	11%	18	100%	15	94%	1	6%	16	100%

Note: this table shows the DSE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

Syria may be compared to the other findings of this study about Arab MENA countries where four countries have over 90% with web sites (Libya, Qatar, Saudi Arabia, and Lebanon). Thus, Syria is similar to Arab MENA countries regarding companies having web sites. The table reveals that only two companies do not have web sites; one company operates in the Industrial Sector (Alahliah Vegetable Oil Company), and the other company operates in the Agriculture Sector (Agricultural Engineering Company for Investments - Nama'a)[51]. Table 6.14 also shows that 100% of the DSE listed companies in the Financial Sector have web sites, also similar to other countries in this study.

The results in Table 6.14 provide evidence that 15 of 16 DSE listed companies that have web sites publish financial information on their web sites. The table also shows that 100% of the DSE listed banks post financial information on their web sites, which again emphasises the effect of the Financial Sector among the other sectors. The tables also shows that only one company does not present financial information on its web site (Aqeelah Takaful Insurance); one possible reason could be that the nature of this company differs slightly from the other Syrian insurance companies; this company is concerned in a particular type of insurance which is solidarity insurance. The next section discusses IFR in Tunisia which is one of the Arab MENA countries located in North Africa.

6.16 Internet Financial Reporting in Tunisia

The home page of the Tunis Stock Exchange (TSE) showed that 55 companies were listed in 2010. Unfortunately, the listed companies' web sites links were not available on the TSE web site; in addition, most of the companies' names were written in French. Thus, the only way to

[51] Government and other institutions such as Arab Authority for Agricultural Investment and Development, which includes 20 Arab countries, are main owners for these two companies.

find the TSE listed companies that had web sites was to use the engine search tools that were mentioned in the introductory part of this chapter. Unlike the other countries that have a separate sector for banks, the TSE breaks down listed companies into eight main sectors[52] and 12 categories. For comparison, the Financial Sector has been separated into Bank Sector, Insurance Sector, and Financial Services Sector; therefore, 10 sectors, including banks, are shown in Table 6.15. This again shows that North African countries tend to have more sectors than Middle Eastern countries. The table displays the TSE listed companies that have web sites and disseminate financial information. It shows that 41% companies operate in the Financial Sector and 82% of all TSE listed companies have web sites. To the best of the researcher's knowledge, there have not been any previous studies on IFR in Tunisia. This may be compared to other Arab MENA countries in this study as Egypt (71%), Algeria (83%), and Morocco (84%). Table 6.15 indicates that all bank (100%) had web sites, emphasising the findings of previous countries in this study that show the effect of this sector on IFR.

52. The TSE classifies the listed companies into eight main sectors, five of which have subcategories; the Financial Sector (Banking, Financial Services, and Insurance), the Consumer Services Sector (General Retailers, and Travel and leisure), the Consumer Goods (Automobiles and Parts, Food and Beverage, and Personal and Household Goods), the Industrials Sector (Construction and Materials, and Industrial Goods and Services), and the Basic Material Sector (Chemicals, and Primary Material).

Table 6.15: Web Sites and Financial Information of TSE Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	11	100%	0	0%	11	20%	10	91%	1	9%	11	24%
Insurance	3	100%	0	0%	3	5%	2	67%	1	33%	3	7%
Financial Services	4	44%	5	56%	9	16%	3	75%	1	25%	4	9%
Telecommunications	2	100%	0	0%	2	4%	1	50%	1	50%	2	4%
Consumer Services	4	80%	1	20%	5	9%	0	0%	4	100%	4	9%
Health Care	1	50%	1	50%	2	4%	0	0%	1	100%	1	2%
Consumer Goods	8	80%	2	20%	10	18%	3	38%	5	62%	8	18%
Industrials	7	88%	1	12%	8	15%	2	29%	5	71%	7	16%
Basic Material	4	100%	0	0%	4	7%	0	0%	4	100%	4	9%
Oil and Gas	1	100%	0	0%	1	2%	1	100%	0	0%	1	2%
Total	45	82%	10	18%	55	100%	22	49%	23	51%	45	100%

Note: this table shows the TSE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

All the 45 TSE listed companies that have web sites were checked and it was found that less than half of these companies (49%) disseminated financial information via their web sites, as shown in Table 6.15. This compares unfavourably to the other Arab MENA countries in this study where generally more than 50% of listed companies post financial information except Iraq (38%), and Jordan (48%). As for the other Arab MENA countries, IFR in Tunisia is voluntary and unregulated; however, the Tunisian Corporate Governance Code (TCGC)[53] mentions, in its shareholders' rights to information section, the existence of a company web site which can be used to provide information to investors:

> "…for publicly listed companies, provide a prominent and easily accessible hyperlink on the companies' web sites to the investors' information including a calendar of periodical information, of general assembly dates and of past and forthcoming events. This web site should also include resolutions' project, financial statements and annual reports". (Institut Arabe des Chefs d'Entreprises, 2008; Para. 1.2)

Even though the code mentions having a company web site and presenting financial and non-financial information disclosure on it, of the 82% of TSE listed companies that have web sites, only 49% disseminate financial information. The results shown in Table 6.15 again emphasise the effect of the Financial Sector against the other sectors where by 91% (10 of 11) of banks disclose financial information. IFR in Tunisia does not seem to be well established with less than half of the TSE listed companies having IFR on their web sites. This might reflect again the effect of country and region on IFR practice. The next section discusses IFR in the United Arab Emirates (UAE), located in the Middle East as opposed to North Africa.

[53] For more information see: www.ecgi.org/codes/documents/guide_tunisia_2008_en.pdf

6.17 Internet Financial Reporting in UAE

As mentioned in Chapter two, there are two stock exchanges in the UAE; the Abu Dhabi Securities Exchange (ADX), and the Dubai Financial Market (DFM). A list of all listed companies was obtained from the web sites of the ADX and DFM. Both stock exchanges' web sites provide hyperlinks for most of the listed companies that have web sites. The number of listed companies on each stock exchange is approximately equal with 69 listed companies on the ADX and 79 listed companies on the DFM. However, a number of listed companies on both exchanges were excluded[54] to give a final number of the listed companies on both stock exchanges as 107, as shown in Table 6.16. The ADX and DFM classify the listed companies into nine sectors; both exchanges use the same classification with one exception that the DFM includes the Transportation Sector whereas the ADX includes the Energy Sector; both sectors have been merged into one sector, as shown in Table 6.16. The table shows that more than half (52%) of the UAE listed companies operate in the Financial Sector (Banks, Investment and Financial Services, and Insurance companies) and that the majority (93%) of the UAE listed companies have web sites. The findings of this study show that UAE listed companies that have web sites has increased compared to 87% in Oyelere and Kuruppu's (2012) study, which was conducted in 2009. The table also indicates that all companies (100%) in the Banks, Telecommunications, Insurance, and Energy and Transportation Sectors have web sites. All listed companies' with web sites were checked to distinguish companies with IFR from companies without IFR, and it was found that 81% of the UAE listed companies that have web sites present financial information on their web sites. This compares to Oyelere and Kuruppr's (2012) study who found that about 65% of UAE listed companies with web sites utilised their web sites for financial disclosure; comparing the two findings shows a large increase during a

54. A number of listed companies were excluded because they were listed on another stock exchange such as Kuwaiti companies.

short time (2009 – 2010). There is no clear reason may interpret this increase since laws and requirements in both markets have not been changed from 2009 to 2010; however, one possible reason could be that companies are under sort of pressure; for instance, because they are large, profitable companies, or because of the effect of the other companies within same sector industry reflecting an isomorphic process. All these factors as well as other factors will be investigated in next chapter.

The table also shows the majority (93%) of listed companies with web sites that operate in the Financial Sectors disseminate financial information; Banks (100%), Investment and Financial Services (100%), and Insurance (85%). This finding is accordance with the findings from the other countries in this study and provides more evidence of the sector effect on IFR. In general, IFR in the UAE seems to be well established with most listed companies having web sites and presenting financial information on their web sites even though IFR in the UAE is still non mandatory and unregulated. Furthermore, UAE seems to be in line with the other Arab Middle Eastern countries; and again provides more evidence of the region effect on IFR. A summary across countries is found in the next section.

Table 6.16: Web Sites and Financial Information of UAE Listed Companies

Sector	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Banks	24	100%	0	0%	24	22%	24	100%	0	0%	24	24%
Investment and Financial Services	4	80%	1	20%	5	5%	4	100%	0	0%	4	4%
Insurance	27	100%	0	0%	27	25%	23	85%	4	15%	27	27%
Telecommunications	3	100%	0	0%	3	3%	3	100%	0	0%	3	3%
Real Estate and Construction	8	89%	1	11%	9	8%	8	100%	0	0%	8	8%
Energy and Transportation	5	100%	0	0%	5	5%	5	100%	0	0%	5	5%
Industrial	13	87%	2	13%	15	14%	6	46%	7	54%	13	13%
Consumer Staples	8	80%	2	20%	10	10%	2	25%	6	75%	8	8%
Services	8	89%	1	11%	9	8%	6	75%	2	25%	8	8%
Total	100	93%	7	7%	107	100%	81	81%	19	19%	100	100%

Note: this table shows the UAE listed companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information distributed by sector classification.

6.18 Summary across Countries

According to Allam and Lymer (2003), the growth of multinational companies and the internet as a tool of communication are two of the most important factors that are bringing different regions and company reporting cultures closer over time; however, this does not mean that differences between Arab MENA countries do not existence. A Kruskal-Wallis test was applied to the analysis in the previous sections to explore whether having a web site differs among Arab MENA countries as shown in Table 6.17.

Table 6.17: Kruskal-Wallis Test for the Arab MENA Countries having a Web Site

Country	N	With Web Site	Without Web Site	Mean Rank	WEB
Algeria	6	83%	17%	787.17	
Bahrain	43	86%	14%	806.92	
Egypt	218	71%	29%	694.78	
Iraq	85	34%	66%	428.88	
Jordan	275	49%	51%	535.23	
Kuwait	218	87%	13%	811.66	
Lebanon	10	90%	10%	835.70	
Libya	10	100%	0%	908.50	
Morocco	75	84 %	16%	792.02	
Oman	114	87%	13%	812.71	
Palestine	40	73%	27%	708.30	
Qatar	42	98%	2%	891.17	
Saudi Arabia	140	97%	3%	887.70	
Syria	18	89%	11%	827.61	
Tunisia	55	82%	18%	776.14	
UAE	107	93%	7%	860.87	
Total	1456				
Chi-Square					287.165
df					15
Asymp. Sig.					**.000****

Note: this table shows the results of Kruskal-Wallis test for the Arab MENA countries regarding having a web site. **= $p \leq 0.01$.

Table 6.17 shows results of the Kruskal-Wallis test; it suggests that the variation across Arab MENA countries is significant ($p<0.01$). It can be concluded therefore that having a web site by

listed companies in Arab MENA countries differs according the country within which the company is listed. However, as shown earlier, GCC countries may have better practices than the other Arab MENA countries; therefore, a further Kruskal-Wallis test is applied to investigate whether or not having a web site across the GCC countries is in fact similar. The results are shown in Table 6.18.

Table 6.18: Kruskal-Wallis Test for the GCC Countries having a Web Site

Country	N	With Web Site	Without Web Site	Mean Rank	WEB
Bahrain	43	86%	14%	317.17	
Kuwait	218	87%	13%	319.33	
Oman	114	87%	13%	319.82	
Qatar	42	98%	2%	355.60	
Saudi Arabia	140	97%	3%	354.01	
UAE	107	93%	7%	341.78	
Total	664				
Chi-Square					17.404
df					5
Asymp. Sig.					**.004****

Note: this table shows the results of Kruskal-Wallis test for the GCC countries regarding having a web site.
**= $p \leq 0.01$.

Table 6.18 shows that having a web site by listed companies in the GCC countries is also significantly different ($p<0.01$); and indicates that having a web site by listed companies in Arab MENA countries is different, including in the GCC countries.

To explore whether IFR practice differs among Arab MENA countries, as opposed to having a web site a Kruskal-Wallis test was applied again and the results are shown in Table 6.19.

Table 6.19: Kruskal-Wallis Test for Arab MENA Countries having IFR

Country	N	With IFR	Without IFR	Mean Rank	IFR
Algeria	5	40%	60%	600.17	
Bahrain	37	97%	3%	966.99	
Egypt	154	64%	36%	684.77	
Iraq	29	38%	62%	451.71	
Jordan	134	48%	52%	526.93	
Kuwait	189	77%	23%	841.72	
Lebanon	9	89%	11%	939.90	
Libya	10	60%	40%	794.30	
Morocco	63	62%	38%	736.06	
Oman	99	67%	33%	778.97	
Palestine	29	69%	31%	721.50	
Qatar	41	88%	12%	981.50	
Saudi Arabia	136	68%	32%	835.90	
Syria	16	94%	6%	964.17	
Tunisia	45	49%	51%	648.70	
UAE	100	81%	19%	915.41	
Total	1096				
Chi-Square					253.662
df					15
Asymp. Sig.					**.000****

Note: this table shows the results of Kruskal-Wallis test for the Arab MENA countries regarding having IFR.
**= $p \leq 0.01$.

The findings from Table 6.19 suggest that not only having a web site is different but also adopting IFR across Arab MENA countries is different too. The table suggests that the variation across countries is significant ($p<0.01$). To confirm that variation across the Arab MENA countries includes the GCC countries, a Kruskal-Wallis test is applied for the GCC countries and the results are shown in Table 6.20.

Table 6.20: Kruskal-Wallis Test for the GCC Countries having IFR

Country	N	With IFR	Without IFR	Mean Rank	IFR
Bahrain	37	97%	3%	381.95	
Kuwait	189	77%	23%	324.83	
Oman	99	67%	33%	296.21	
Qatar	41	88%	12%	388.57	
Saudi Arabia	136	68%	32%	322.17	
UAE	100	81%	19%	358.43	
Total	602				
Chi-Square					20.564
df					5
Asymp. Sig.					**.001****

Note: this table shows the results of Kruskal-Wallis test for the GCC countries regarding having IFR. **= $p \leq 0.01$.

Similarly, Table 6.20 indicates significant differences between the GCC countries regarding listed companies that have a web site and disseminate financial information via their a web site.

In general, the Kruskal-Wallis test results indicate a variation across Arab MENA countries in both categories; having a web site and disseminating financial information. Factors influencing listed companies in Arab MENA countries will be investigated in Chapter 7. However, to know more about the differences between these countries, a Mann-Whitney test is applied to examine the difference between pairs of countries. Table 6.21 displays results of Mann-Whitney test for Arab MENA countries regarding companies having a web site.

Table 6.21: Mann-Whitney Test for Arab MENA Listed Companies that have a Web Site

	ALG	BAH	EGY	IRQ	JOR	KUW	LEB	LIB	MOR	OMA	PAL	QAT	SAU	SYR	TUN	UAE
ALG																
BAH	.860															
EGY	.500	**.038***														
IRQ	**.017***	**.000****	**.000****													
JOR	.094	**.000****	**.000****	**.018***												
KUW	.812	.909	**.000****	**.000****	**.000****											
LEB	.705	.742	.186	**.001****	**.010****	.763										
LIB	.197	.214	**.044***	**.000****	**.001****	.218	.317									
MOR	.966	.767	**.023***	**.000****	**.000****	.562	.623	.175								
OMA	.806	.896	**.001****	**.000****	**.000****	.971	.776	.223	.586							
PAL	.577	.129	.812	**.000****	**.005****	**.023***	.251	.063	.144	**.038***						
QAT	.105	.054	**.000****	**.000****	**.000****	**.043***	.265	.626	**.025***	**.050***	**.001****					
SAU	.070	**.005****	**.000****	**.000****	**.000****	**.001****	.226	.589	**.000****	**.002****	**.000****	.869				
SYR	.727	.766	.098	**.000****	**.001****	.792	.929	.283	.604	.810	.170	.159	.086			
TUN	.928	.576	.096	**.000****	**.000****	.356	.529	.146	.744	.390	.282	**.016***	**.000****	.485		
UAE	.349	.146	**.000****	**.000****	**.000****	.068	.680	.406	**.041***	.101	.001	.312	.165	.490	**.022***	

Note: this table shows the results of Mann-Whitney test for the Arab MENA countries regarding having a web site. **= $p \leq 0.01$; *= $p \leq 0.05$. ALG= Algeria; BAH= Bahrain; EGY= Egypt; IRQ= Iraq; JOR= Jordan; KUW= Kuwait; LEB= Lebanon; LIB= Libya; MOR= Morocco; OMA= Oman; PAL= Palestine; QAT= Qatar; SAU= Saudi; SYR= Syria; TUN= Tunisia; UAE= United Arab Emirates.

Table 6.21 supports the earlier findings from Kruskal-Wallis test and indicates differences between countries. For instance, the table shows significant difference at 1% level between Iraq and the rest of Arab MENA countries, except Jordan where the significance level is 5%, emphasising the poor status of companies that have a web site in Iraq. Factors affected listed companies within these countries to have a web site are illustrated in Chapter 7.

Furthermore, Mann-Whitney test is applied to these countries regarding companies that have a web site and present financial information (IFR) through their web sites; and the results are shown in Table 6.22.

Table 6.22: Mann-Witney Test for Arab MENA Listed Companies that have IFR

	ALG	BAH	EGY	IRQ	JOR	KUW	LEB	LIB	MOR	OMA	PAL	QAT	SAU	SYR	TUN	UAE
ALG																
BAH	**.006****															
EGY	.573	**.000****														
IRQ	.170	**.000****	**.000****													
JOR	.566	**.000****	**.000****	**.041***												
KUW	.092	**.026***	**.000****	**.000****	**.000****											
LEB	.071	.780	**.030***	**.000****	**.000****	.376										
LIB	.317	.099	.351	**.000****	**.008****	.671	.342									
MOR	.382	**.001****	.292	**.000****	**.000****	**.025***	.096	.636								
OMA	.239	**.003****	**.025***	**.000****	**.000****	.122	.174	.897	.426							
PAL	.541	**.001****	.557	**.000****	**.000****	**.046***	.091	.575	.839	.389						
QAT	**.003****	.800	**.000****	**.000****	**.000****	**.013***	.656	.066	**.000****	**.001****	**.001****					
SAU	.106	**.025***	**.000****	**.000****	**.000****	.876	.356	.715	**.050***	.202	.071	**.013***				
SYR	**.022***	.970	**.002****	**.000****	**.000****	.143	.828	.180	**.016***	**.040***	**.017***	.814	.134			
TUN	.753	**.000****	.509	**.000****	**.010****	**.000****	**.021***	.244	.177	**.030***	.335	**.000****	**.001****	**.002****		
UAE	**.019***	.340	**.000****	**.000****	**.000****	.062	.810	.246	**.001****	**.003****	**.002****	.221	.063	.530	**.000****	

Note: this table shows the results of Mann-Whitney test for the Arab MENA countries regarding having IFR. **= $p \leq 0.01$; *= $p \leq 0.05$. ALG= Algeria; BAH= Bahrain; EGY= Egypt; IRQ= Iraq; JOR= Jordan; KUW= Kuwait; LEB= Lebanon; LIB= Libya; MOR= Morocco; OMA= Oman; PAL= Palestine; QAT= Qatar; SAU= Saudi; SYR= Syria; TUN= Tunisia; UAE= United Arab Emirates.

Table 6.22 shows differences between pairs of Arab MENA countries; it is again shows that Iraq and Jordan are different from the rest of Arab MENA countries not only in having a web site, but also in posting financial information via their web sites. Furthermore, the table shows that there is no difference between Iraq and Jordan indicating similar IFR in both countries. Moreover, the findings indicate that there is no difference between the GCC countries; for instance, by looking at the results of UAE, it can be seen that there is no difference between UAE and Bahrain, Kuwait, Qatar, and Saudi; however, there is a difference between UAE and Oman. Discussion of factors influence listed companies in Arab MENA countries to have a web site and/ or disseminate financial information is included in Chapter 7. A summary and discussion of this chapter is found in the next section.

6.19 Summary of Chapter

This chapter reports on IFR in Arab MENA countries by analysing the listed companies in the 16 countries that had a stock exchange at the time of this study. An analysis of IFR in the 16 Arab MENA countries was conducted in three steps; the first step was identifying the stock exchange in every single country; the second step was determining those listed companies with web sites; and finally the third step was distinguishing the listed companies with IFR from those do not have IFR by checking the individual web sites of those companies with web sites.

The findings of this study reveal that the number of companies that have a web site varies amongst Arab MENA countries; as all companies in some countries, such as Libya (100%), have a web site, conversely a few number of companies in some other countries, such as Iraq (34%), have a web site.

The IFR practice also appeared to vary amongst Arab MENA countries. While some Arab MENA countries have a high percentage of IFR such as Bahrain (97%) and Syria (94%), other Arab MENA countries have a low percentage of IFR such as Iraq (38%) and Algeria (40%).

Table 6.23 compares the Arab MENA countries and provides a picture of the stock exchange size in these countries, the number of listed companies with web sites, and finally the number of listed companies with web sites that have financial information.

Table 6.23: Web Sites and Financial Information of the Arab MENA Listed Companies

Country	Region	With accessible web site		Without accessible web site		Total		With financial information		Without financial information		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Algeria	NA	5	83%	1	17%	6	0%	2	40%	3	60%	5	0%
Bahrain	ME-GCC	37	86%	6	14%	43	3%	36	97%	1	3%	37	3%
Egypt	NA	154	71%	64	29%	218	15%	98	64%	56	36%	154	14%
Iraq	ME	29	34%	56	66%	85	6%	11	38%	18	62%	29	3%
Jordan	ME	134	49%	141	51%	275	19%	64	48%	70	52%	134	12%
Kuwait	ME-GCC	189	87%	29	13%	218	15%	146	77%	43	23%	189	17%
Lebanon	ME	9	90%	1	10%	10	1%	8	89%	1	11%	9	1%
Libya	NA	10	100%	0	0%	10	1%	6	60%	4	40%	10	1%
Morocco	NA	63	84 %	12	16%	75	5%	39	62%	24	38%	63	6%
Oman	ME-GCC	99	87%	15	13%	114	8%	66	67%	33	33%	99	9%
Palestine	ME	29	73%	11	27%	40	3%	20	69%	9	31%	29	3%
Qatar	ME-GCC	41	98%	1	2%	42	3%	36	88%	5	12%	41	4%
Saudi	ME-GCC	136	97%	4	3%	140	10%	92	68%	44	32%	136	12%
Syria	ME	16	89%	2	11%	18	1%	15	94%	1	6%	16	1%
Tunisia	NA	45	82%	10	18%	55	4%	22	49%	23	51%	45	4 %
UAE	ME-GCC	100	93%	7	7%	107	7%	81	81%	19	19%	100	9%
Total		1096	75%	360	25%	1456	100%	742	68%	354	32%	1096	100%

Note: this table shows the listed Arab MENA countries' companies that have web sites or do not have web sites; as well as companies that have web sites and disseminate or do not disseminate financial information. NA= North Africa countries; ME= Middle East countries; ME-GCC= Middle East countries as well as Gulf Co-operative Council countries.

Table 6.23 shows that there are 1456 companies listed on 16 stock exchanges in Arab MENA countries; the number of the listed companies in each stock exchange varies from only 6 companies on the Algerian Stock Exchange to 275 companies on the Amman Stock Exchange. This difference may be due to the location of these countries where Middle Eastern region appears to be more appropriated area for investment and business than North Africa; and also economies of countries in this region are stronger than North Africa. The table reveals that about 75% of listed companies in Arab MENA countries have web sites; and indicates that more than 50% in each country, except Jordan (49%) and Iraq (34%), have a web site. A possible reason that Iraq has a low rate of companies with web sites is that Iraq is unstable country politically and economically. Despite Jordan being more stable than Iraq, the rate of companies with web sites is still considered to be low; one possible reason could be that the Financial Sector in general forms more than half[55] of the market capitalisation in Amman Stock Exchange; in other words, investors would prefer to invest their money in the Financial Sector in general and in Banks in particular; as a result, the highest rate of companies with a web site is presented by this sector, as shown in Table 6.24 which displays listed companies in Arab MENA countries that have a web site and disseminate financial information distributed by three industrial classification: i) banks; ii) other financial companies; iii) non-financial companies.

[55.] The market capitalisation in December 2010 in Amman Stock Exchange was 21.8 billion of Jordanian Dinar. The Financial Sector market capitalisation is 11.7; in particular, the Banks Sector market capitalisation in the same date is 9.9 billion of Jordanian Dinar.

Table 6.24: Web Sites and Financial Information of the Arab MENA Listed Companies by Industrial Classification

Country	Region	Banks				Other Financial Companies				Non- Financial Companies			
		WEB		IFR		WEB		IFR		WEB		IFR	
		N	%	N	%	N	%	N	%	N	%	N	%
Algeria	NA	-	-	-	-	-	-	-	-	5	83%	2	40%
Bahrain	ME-GCC	8	100%	8	100%	17	100%	17	100%	12	67%	11	92%
Egypt	NA	12	92%	11	92%	22	67%	17	77%	120	70%	70	58%
Iraq	ME	20	100%	10	50%	2	14%	1	50%	7	14%	0	0%
Jordan	ME	15	100%	15	100%	39	62%	27	69%	80	41%	22	28%
Kuwait	ME-GCC	9	100%	9	100%	58	94%	51	88%	122	83%	86	70%
Lebanon	ME	6	100%	6	100%	-	-	-	-	3	75%	2	67%
Libya	NA	5	100%	5	100%	3	100%	1	33%	2	100%	0	0
Morocco	NA	6	100%	6	100%	10	91%	2	20%	47	81%	31	66%
Oman	ME-GCC	6	100%	6	100%	23	92%	20	91%	70	83%	40	57%
Palestine	ME	7	100%	6	86%	9	69%	6	67%	13	65%	8	62%
Qatar	ME-GCC	9	100%	9	100%	5	100%	5	100%	27	96%	22	81%
Saudi	ME-GCC	11	100%	11	100%	34	97%	20	59%	91	97%	61	67%
Syria	ME	10	100%	10	100%	4	100%	3	75%	2	50%	2	100%
Tunisia	NA	11	100%	10	91%	7	58%	5	71%	27	84%	7	26%
UAE	ME-GCC	24	100%	24	100%	31	97%	27	87%	45	88%	30	67%
Total		159	97%	146	93%	264	80%	202	77%	673	70%	394	58%

Note: this table shows the listed Arab MENA countries' companies that have web sites and disseminate financial information distributed by industrial classification. NA= North Africa countries; ME= Middle East countries; ME-GCC= Middle East countries as well as Gulf Co-operative Council countries; WEB= companies with a web site; IFR= companies with internet financial reporting.

Table 6.24 shows that there are no banks or other financial companies in Algeria; and only banks that represent the Financial Sector in Lebanon. The table reveals that the Banks are the best sector amongst the other sectors; where the majority of banks in Arab MENA countries have a web site. All banks (100%) have a web site except banks in Egypt (92%) where 12 out 13 banks have web sites; this means that there is only one bank in Egypt that does not have an accessible web site[56]. Furthermore, the table shows that the other financial companies are ranked second after banks; which provides an evidence of the effect of the Financial Sector in general and the Banks in particular on this practice. On the other hand, the table shows that 70% of the rest of listed companies in the other sectors had a web site.

Regarding to IFR, the findings of this study, as shown in Table 6.24, reveal that again the Financial Sector is much more likely to have IFR (77%), especially the Banks (93%); this is consistent with Ismail's (2002; p. 13) study who indicates that "banking and investment companies are more likely to disseminate financial information on the Web compared with companies in other types of industry". Only 58% of listed companies in other sectors present financial information on their web site. The table shows that non-financial Libyan companies (2 companies) do not use their web sites for financial disclosure purposes; these companies, which operate in Industrial and Tourism Sectors, use their web sites for marketing purposes.

As a result, the findings of the current study, as shown in Table 6.24, provide strong evidence of the effect of the Financial Sector in general and Banks in particular on IFR by listed companies in Arab MENA countries. The effect of country and region can be seen, as shown in Table 6.25, which displays listed companies in the Arab MENA countries distributed by three regions.

[56.] In fact, there is a link for this bank, which is Suez Canal Bank; however, it is not accessible.

Table 6.25: Web Sites and Financial Information of the Arab MENA Listed Companies by Region Classification

Region														
North Africa					Middle East									
					Non-GCC				GCC					
Country	WEB		IFR		Country	WEB		IFR		Country	WEB		IFR	
	N	%	N	%		N	%	N	%		N	%	N	%
Algeria	5	83%	2	40%	Iraq	29	34%	11	38%	Bahrain	37	86%	36	97%
Egypt	154	71%	98	64%	Jordan	134	49%	64	48%	Kuwait	189	87%	146	77%
Libya	10	100%	6	60%	Lebanon	9	90%	8	89%	Oman	99	87%	66	67%
Morocco	63	84%	39	62%	Palestine	29	73%	20	69%	Qatar	41	98%	36	88%
Tunisia	45	82%	22	49%	Syria	16	89%	15	94%	Saudi	136	97%	92	68%
										UAE	100	93%	81	81%
Total listed companies*				364			429							664
Total	277	76%	167	60%	Total	217	51%	118	54%	Total	602	91%	457	76%

Note: this table shows the listed Arab MENA countries' companies that have web sites and disseminate financial information. NA= North Africa countries; ME= Middle East countries; GCC= Gulf Co-operative Council countries; WEB= companies with a web site; IFR= companies with internet financial information. * The listed companies in North Africa region present 25%; and Meddle East region 75% (Non-GCC 29% and GCC 46%).

Table 6.25 shows that the number of listed companies in Middle East region (75%) is much higher than North Africa region (25%); particularly, the number of listed companies in GCC countries (46%) is higher than other countries (29%) in the Middle East region.

The table reveals that listed companies that have a web site in the GCC region (91%) is much higher than the other MENA countries; moreover, it indicates that listed companies that have a web site in North Africa (76%) are ranked second; whereas listed companies in other Middle Eastern countries have the lowest rate (51%).

Table 6.25 also indicates that not only the percentage of listed companies that have a web site varies from one region to another but also varies from one country to another varying between 86% and 98% in GCC region; from 71% to 100% in North Africa region; and from 34% to 90% in non-GCC countries in the Middle Eastern region.

Furthermore, Table 6.25 shows that 76% of listed companies that have a web site in the GCC posted their financial information on their web site. Accordingly, listed companies in the GCC region are the best amongst the other regions where 60% of listed companies in North Africa presented financial information; and only 54% of listed companies in the Middle East-non GCC region disclosed financial information on their web site.

Generally, it seems that IFR in GCC Arab MENA countries is becoming more established with high percentage of the listed companies have web sites and present financial information on their web site.

Overall, coercive, mimetic, and normative isomorphisms may be in process leading to form community of practices by Arab MENA listed companies. This will be investigated by analysing sector, country, and region as an influence as well as other factors that may influence listed companies in having IFR among selected Arab MENA countries in the next chapter.

Chapter 7: Variations in IFR among Selected Arab MENA Countries

Chapter 7

Variations in IFR among Selected Arab MENA Countries

7.1 Introduction

Chapter 6 reported a snapshot on the current situation of IFR practices by the listed companies in Arab MENA countries in 2010. As seen in Chapter 6, IFR in Arab MENA countries differs from one country to another and from one sector to another. This indicates the country and sector effects on IFR adoption and this chapter further investigates the factors that might explain the relationship in IFR adoption variation. Therefore, this chapter aims to answer the second research question of which factors influence IFR adoption in selected Arab MENA countries; it examines the effect of selected company characteristics on IFR practices. This chapter is organised as follows: Section 7.2 of this chapter identifies the sample and data collection, while Section 7.3 describes the research variables and their measurements, Section 7.4 includes statistics analysis, Section 7.5 discusses the univariate analysis, before Section 7.6 discussion the multivariate analysis; and finally, Section 7.7 includes a summary and discussion.

7.2 Sample and Data Collection

As seen in Chapter 6, 16 Arab MENA countries have stock exchanges and all of the listed companies in these stock exchanges were investigated to determine the extent of their IFR adoption (first aim of this study). The sample of this chapter differs slightly from the previous chapter as shown in the next section.

7.2.1 The Sample

The first empirical work of this thesis investigated the extent of IFR by Arab MENA listed companies including 16 countries with a total number of 1456 listed companies; and the findings reveal that there is a variation between Arab MENA listed companies not only in companies having a web site but also in having IFR. Moreover, the findings reveal that there are differences between the three regions (North Africa, Middle East-GCC, and Middle East-Non GCC); where listed companies in the Middle East-GCC region are the first in having a web site and IFR; whereas listed companies in the North Africa region are the second; and listed companies in the Middle East-Non GCC region are the third. This chapter investigates the relationship between company size, profitability, leverage, auditor type, sector, country and region and IFR adoption by including listed companies in the first and the second regions only. The reason not to include listed companies in the third region is that there is a large variation between the first and the third region. Moreover, data of the majority of listed companies in the third region was not available on Data Stream at the time of this study. Therefore, only 10 of the 16 Arab MENA countries present the sample of this chapter. The countries are from both the regions of MENA; six in the Middle East-GCC (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and UAE); and four in North Africa[57] (Egypt, Libya, Morocco, and Tunisia).

The number of listed companies in the 10 Arab MENA countries is 961 companies. The collection of information and the type of data are discussed in the next section.

[57.] Algeria was excluded because data was not available at the time of this study.

7.2.2 Data Collection

To identify the different factors that may influence listed companies having a web site and disseminating financial information via their web site, data was collected for companies: i) with a web site that disseminate financial information via their web site (IFRC); ii) from companies with a web site but do not disseminate financial information via their web site (N-IFRC); and iii) from companies without a web site (N-WEBC). Most data was collected from Data Stream except data about Libya which was not available on Data Stream at the time of this study which was, therefore, collected from the Libyan Stock Market. Where information was not available on Data Stream, it was collected from companies' web site (for those companies with a web site); where a company did not have a web site, information was collected from the stock exchange on which the company was listed. To carry out the analysis, data was limited to one year (2010)[58] because IFR is a type of voluntary disclosure; in other words, as there are no policies that regulate IFR, it is possible for a study to include just one year. As the current study is a cross-sectional multi-country study of developing countries with emerging stock markets, all data was collected from Data Stream in US dollars for comparison purposes. As mentioned above, there was no data about Libya on Data Stream; therefore, the exchange rate for the Libyan currency as at 31 December 2010 was obtained from the Central Bank of Libya and was 1 US dollar equals 1.2538 Libyan Dinar (LYD). Once the data was collected, the next step was to choose the measurement of the variables included in the analysis.

7.3 The Research Variables and their Measurements

This section identifies both the dependent and the independent variables used in this study.

[58.] The year 2010 was chosen because it was the most recent year at the time of this study.

7.3.1 Dependent Variables

This study aims to identify factors that may influence IFR adoption. Many previous studies use the level of IFR as a dependent variable (see for example Ettredge et al., 2002; Xiao et al., 2004; Abdel Salam et al., 2007; Elsayed, 2010); but this study is a cross-sectional multi-country study of IFR per se and not the level of IFR. Determining the level of IFR usually involves a disclosure index of items relevant to addressing the research questions. Moreover, this study goes further and has five dependent variables with three measures: i) companies with IFR and hence a web site; ii) companies with a web site but no IFR; and iii) companies with no web site and hence no IFR. The first dependent variable follows Oyelere and Kuruppr's (2010) classification and compares companies with a web site and engaging in IFR against companies not engaging in IFR because either they do not have a web site or they have a web site but have no IFR. The second dependent variable compares companies with a web site and IFR versus companies with a web site but no IFR. The third dependent variable is for companies that have a web site and IFR versus companies that do not have a web site. The fourth dependent variable compares companies with a web site and with or without IFR to companies without a web site. The fifth dependent variable is for companies that have a web site but no IFR versus companies that do not have a web site.

The dependent variable in previous studies, which use a disclosure index, take a continuous number reflecting the percentage of disclosure; but the dependent variables in this study take a dichotomous variable of 1 or 0 as shown in Table 7.1.

Table 7.1: The Dependent Variables

Variable	Explanation
IFR_1	1= if a company has IFR (IFRC). 0= if a company has no IFR (N-IFRC), with or without a web site (N-WEBC).
IFR_2	1= if a company has IFR (IFRC). 0= if a company has no IFR but has a web site (N-IFRC).
IFR_3	1= if a company has IFR (IFRC). 0= if a company has no IFR and no web site (N-WEBC).
WEB_1	1= if a company has a web site (IFRC/ N-IFRC). 0= if a company has no web site (N-WEBC).
WEB_2	1= if a company has a web site but no IFR (N-IFRC). 0= if a company has no web site (N-WEBC).

Note: this table displays the dependent variables and their proxy measures.

7.3.2 Independent Variables

Many theories (such as Agency Theory, Signalling Theory, and Stewardship Theory) have been used in previous studies to explain the variables that affect IFR adoption. Most of these studies have been conducted in developed countries and, to the best of the researcher's knowledge, there are no studies either in developed or developing countries have used an institutional perspective in explaining IFR adoption. To explain the factors that may influence listed companies in Arab MENA countries to disseminate financial information via their web site, seven independent variables were chosen for this study; of which five have been used extensively in previous studies (size, profitability, leverage, auditor type, and sector) as well as country as this is a cross-sectional multi-country study; and region which has not been used in any previous study known to the author and hence contributes to our knowledge.

In order to test the relationship between the dependent and independent variables, the independent variables are classified into two types: i) continuous variables; and ii) categorical variables. Sections 7.3.2.1 and 7.3.2.2 justify the independent variables and formulate the hypotheses.

7.3.2.1 Continuous Independent Variables

7.3.2.1.1 Company Size

As mentioned in Chapter 3, company size is the most common attribute that has been used in previous studies in explaining IFR (Craven and Marston, 1999; Ashbaugh et al., 1999; Pirchegger and Wagenhofer, 1999; Brennan and Hourigan, 1999; Ettredge et al., 2002; Larrán and Giner, 2002; Debreceny et al., 2002; Bonsón and Escobar, 2002; Ismail, 2002; Marston, 2003; Allam and Lymer, 2003; Oyelere et al., 2003; Geerings et al., 2003; Joshi and Al-Modhaki, 2003; Rodrigues and Menezes, 2003; Xiao et al., 2004; Marston and Polei, 2004; mendes-da-Silvia and Christensen, 2004; Hadi, 2005; Bollen et al., 2006; Prabowo, 2006; Celik et al., 2006; Bonsón and Escobar, 2006; Barako et al., 2006; Chan and Wickramasinghe, 2006; Momany and Shorman, 2006; Pervan, 2006; Andrikopoulos and Diakidis, 2007; Al-Shammari, 2007; Barako et al., 2008; Al-Motrafi, 2008; Almilia, 2009; Despina and Demetrios, 2009; Alanezi, 2009; Al-Moghaiwli, 2009; Alarussi et al., 2009; Desoky and Mousa, 2009; Fekete et al., 2009; Aly et al., 2010; Homayoun and Abdul Rahman, 2010; Oyelere and Kuruppr, 2010; Elsayed, 2010; Agboola and Salawu, 2012; Alali and Romero, 2012; Boubaker et al., 2012; AbuGhazaleh et al., 2012; Uyar, 2012; Momany and Pillai, 2012; Hossain et al., 2012; Agyei-Mensah, 2012; Turrent and Ariza, 2012). This study examines company size as an institutional factor as the pressure on larger companies to have IFR will be greater than on smaller companies (Bonsón and Escobar, 2006; Aerts et al., 2006; Andrikopoulos and Diakidis, 2007) because of

the nature and complexity of larger companies and the pressure on them to disclose more financial information, often voluntarily, by using the internet (Debreceny et al., 2002; Marston and Polei, 2004; Cormier et al., 2005; Andrikopoulos and Diakidis, 2007; Turrent and Ariza, 2012). According to Alarussi et al. (2009), "… large companies are under pressure to disclose their financial information to avoid speculative trading of their shares" (p. 11). In addition, larger companies are more visible publicly; and thus, stakeholders like information about these companies (Jaggi and Low, 2000; Debreceny et al., 2002; Cormier et al., 2005; Bollen et al., 2006) putting pressure on them to disclose information such as by using the internet as a quick and easy tool. From mimetic isomorphism, Hannan and Freeman (1977) note that companies of a similar size are similar in terms of structure and strategy and rely on the same environmental resources; and therefore, are affected by similar structural constraints. According to Guerreiro et al. (2012) "… large companies share institutional logics that shape their accounting practices and the way they pursue organisational legitimacy" (p.488). As a result, larger companies may imitate each other through mimetic and normative isomorphic practices to be in line with their peer group companies.

The measurement of size varies from study to study with total assets and market capitalisation are the most commonly used proxies. This study adopts the same approach and uses total assets and market capitalisation as two proxies for the size of listed companies in Arab MENA countries. Most studies, both in developed and developing countries, find a positive relationship between company size and IFR (Craven and Marston, 1999; Ismail, 2002; Oyelere et al., 2003; Xiao, 2003; Hadi, 2005; Pervan, 2006; Al-Shammari, 2007; Al-Motrafi, 2008; Alanezi, 2009; Al-Moghaiwli, 2009; Desoky and Mousa, 2009; Oyelere and Kuruppr, 2010; Elsayed, 2010).

Thus, in the same vein, this study assumes a positive relationship between company size and IFR. The first hypothesis is:

***H_1:* Larger companies in Arab MENA countries have more IFR.**

7.3.2.1.2 Profitability

Profitability[59] may also explain the variability in IFR between companies (Ashbaugh et al., 1999; Ettredge et al., 2002; Larrán and Giner, 2002; Marston, 2003; Oyelere et al., 2003; Joshi and Al-Modhaki, 2003; Xiao et al., 2004; Marston and Polei, 2004; Mendes-da-Silva and Chistensen, 2004; Hadi, 2005; Prabowo, 2006; Celik et al., 2006; Bollen et al., 2006; Momany and Al-Shorman, 2006; Chan and Wickramasinghe, 2006; Barako et al., 2006; Andrikopoulos and Diakidis, 2007; Al-Shammari, 2007; Barako et al., 2008, Al-Motrafi, 2008; Alanezi, 2009; Alarussi et al., 2009; Desoky and Mousa, 2009; Al-Moghaiwli, 2009; Fekete et al., 2009; Aly et al., 2010; Elsayed, 2010; Agboola and Salawu, 2012; Alali and Romero, 2012; Boubaker et al., 2012; Agyei-Mensah, 2012; Hossain et al., 2012). From an institutional and stakeholder perspective, profitable companies are more successful and there may be actor networks forming a community of practice (Haveman, 1993); and they serve as models for other companies (Burns and Wholey, 1993).

Return on assets (ROA) and return on equity (ROE) are the most common variables that are used in previous studies to proxy for profitability. This study adopts the same approach and uses ROA and ROE as two proxies for the profitability of listed companies in Arab MENA countries. In particular ROA is used in conjunction with TA for size to be consistent and ROE is used with

[59]. From a signalling perspective, profitable companies may use the internet to disclose more information to attract investors, enhance the share price, and publicise the fact that they are well run companies, as the absence of voluntary disclosure may be an indicator of bad news (Etterdge et al., 2002).

MC. Previous studies have mixed findings but the majority find no relationship between IFR and profitability (Ashbaugh et al, 1999; Ettredge et al., 2001; Larrán and Giner, 2002; Momany and Al-Shorman, 2006; Barako et al., 2008; Oyelere and Kuruppr, 2010), but there is more evidence in MENA countries that profitability affects IFR leading to the second hypothesis:

***H_2:* More profitable companies in Arab MENA countries have more IFR.**

7.3.2.1.3 Leverage

Based on the discussion in Chapter 3, leverage is also a factor that may explain the variability in IFR[60] (Brennan and Hourigan, 1999; Debreceny et al., 2002; Larrán and Giner, 2002; Ismail, 2002; Joshi and Al-Modhaki, 2003; Oyelere et al., 2003; Xiao et al., 2004; Mendes-da-Silva and Christensen, 2004; Bollen et al., 2006; Celik et al., 2006; Chan and Wickramasinghe, 2006; Prabowo, 2006; Momany and Al-Shorman, 2006; Barako et al., 2006; Andrikopoulos and Diakidis, 2007; Al-Shammari, 2007; Barako et al., 2008; Alanezi, 2009; Almilia, 2009; Alarussi et al., 2009; Fekete et al., 2009; Aly et al., 2010; Homayoun and Abdul Rahman, 2010; Oyelere and Kuruppr, 2010; Elsayed, 2010; Alarussi et al., 2011; Agboola and Salawu, 2012; Alali and Romero, 2012; Boubaker et al., 2012; Turrent and Ariza, 2012; Momany and Pillai, 2012; Agyei-Mensah, 2012). Under an institutional theory framework, the demand of more information by stakeholders may result in a coercive isomorphism and put pressure on these companies to use the internet for financial disclosure.

The ratio of debt to equity is often used to measure leverage (Debreceny et al., 2002; Larrán and Giner, 2002; Ismail, 2002; Oyelere et al. 2003; Chan and Wickramasinghe, 2006; Alanezi, 2009;

60. Camfferman and Cooke (2002) report that highly leveraged companies need to satisfy long-term creditors by disclosing more financial information than lower leveraged companies; and using the internet can allow them to constantly monitor the affairs of the company (Jaggi and Low, 2000; Debreceny et al., 2002; Alarussi et al., 2009; Agboola and Salawu 2012).

Fekete et al., 2009); hence, this study adopts the same approach and uses debt to equity ratio as a proxy for the leverage of listed companies in Arab MENA countries. Previous studies have mixed findings but the majority findings in Arab MENA countries is a positive relationship between IFR and leverage (Ismail, 2002; Joshi and Al-Modhaki, 2003; Momany and Al-Shorman, 2006; Oyelere and Kuruppr, 2010; Elsayed, 2010; Momany and Pillai, 2012) leading to the third hypothesis:

***H_3:* Higher leveraged companies in Arab MENA countries have more IFR.**

7.3.2.2 Categorical Independent Variables

7.3.2.2.1 Type of Auditor

The type of auditor is often divided into two groups; the Big-4 audit firms[61] and others. The auditing firm type effect on IFR has been examined in many studies (Joshi and Al-Modhaki, 2003; Xiao et al., 2004; Bonsón and Escobar, 2006; Chan and Wickramasinghe, 2006; Al-Sahmmari, 2007; Al-Motrafi, 2008; Fekete et al, 2009; Alanezi, 2009; Elsayed, 2010; Aly et al., 2010; Agboola and Salawu, 2012; Boubaker et al., 2012; Momany and Pillai, 2012; Agyei-Mensah, 2012; Alali and Romero, 2012). It has been argued that the audit firm has a significant influence on the disclosure practices of companies (Al-Mulhem, 1997) bringing a normative exo isomorphism to this organisational field. Thus, companies audited by one of the Big-4 audit firms are more likely to provide voluntary IFR disclosure than companies that are not. The Big-4 firms play a role in the globalisation of accounting and represent the normative pressures that affect companies and the choices they make in accordance to their reporting and practices that are implemented (Al-Omari, 2010) as large and well-known audit firms have expertise (Wallace et al., 1994); and want to maintain their own reputations (Haniffa and Cooke, 2002; Alanezi,

[61.] The Big-4 Audit Companies are Deloitte and Touche, Ernst and Young, KPMG, and PricewaterhouseCoopers.

2009). Xiao et al. (2004) reveal that the Big-5 companies (at the time of their study) are more likely to ease the diffusion of innovative practice, including IFR, to an organisational field. This means that the big audit firms pressurise the companies they audited to have IFR and can provide implementation support (Xiao et al., 2004). Moreover, the big audit firms are partners of XBRL and are better equipped than smaller auditors (Xiao et al., 2004; Dunne et al., 2013). Using an institutional theory framework, listed companies with Big-4 audit firms are more likely to have a web site and disseminate financial information even though IFR is voluntary and unregulated across the countries of this study.

Prior studies have mixed findings; for instance, Xiao, et al. (2004); Bonsón and Escobar (2006); Al-Shammari (2007); Alanezi (2009) found a significant relationship between IFR and auditor type; whereas other studies such as Cahn and Wickramasinghe (2006); and Aly et al. (2010) did not find a relationship between IFR and auditor type. However, because the literature is mixed, this study will assume that there is a significant relationship between the type of auditor and IFR. The fourth hypothesis is:

***H_4:* Companies in Arab MENA countries audited by the Big-4 will have more IFR.**

7.3.2.2.2 Industrial Sector

The industrial sector effect on IFR has been examined in many studies (Ashbaugh et al., 1999; Craven and Marston, 1999; Brennan and Hourigan, 1999; Larrán and Giner, 2002; Bonsón and Escobar, 2002; Debreceny et al., 2002; Ismail, 2002; Marston, 2003; Geerings et al., 2003; Rodrigues and Menezes, 2003; Oyelere et al., 2003; Joshi and Al-Modhaki, 2003; Xiao et al., 2004; Bollen et al., 2006; Momany and Al-Shorman, 2006; Chan and Wickramasinghe, 2006; Bonsón and Escobar, 2006; Celik et al., 2006; Barako et al., 2006; Pervan, 2006; Al-Shammari,

2007; Al-Motrafi, 2008; Despina and Demetrios, 2009; Fekete et al., 2009; Desoky and Mousa, 2009; Alanezi, 2009; Oyelere and Kuruppr, 2010; Homayoun and Abdul Rahman, 2010; Aly et al., 2010; Elsayed, 2010; Turrent and Ariza, 2012; Uyar, 2012; Alali and Romero, 2012; Boubaker et al,. 2012). The variety of disclosure levels between industries may be attributed to the voluntary disclosure by a company that dominates that particular industry (Oyelere et al. 2003; Marston, 2003); and thus, companies in the same sector follow that company as a mimetic isomorphism (Amran and Haniffa, 2011) reflecting a community of practice. For example, a motivating force for companies to follow innovative practices such as IFR, as adopted by other companies in the same sector is to avoid the risk of losing legitimacy and to enhance their competitive advantage (Unerman and Bennett, 2004; Bonsón and Escobar, 2006). From an institutional perspective, different sectors could have particular community of practices; and hence, companies within one sector may adopt similar practices such as IFR just to be in line with each other (DiMaggio and Powell, 1983).

As mentioned in Chapter 3, the number of sectors in previous studies has varied, but the current study is a cross-sectional multi-country study where industrial classifications differ from one country to another (see Chapter 6); for the purpose of this chapter, Marston's (2003) study is followed; she classifies her sample into four industrial classifications: i) financial services; ii) general services; iii) utilities; and iv) industrial; this study repeats that except that utilities is replaced with Real Estate Sector as 7 stock exchanges of the Arab MENA countries have this (see Chapter 6). Therefore, the classifications in this study are: i) financial[62]; ii) services[63]; iii)

62. The Financial Sector includes banks, insurance companies, investment companies, and diversifies financial services.

63. The Services Sector includes health care, educational, hotels and tourism, transportation, technology and communications, media, and utilities and energy.

real estate[64]; and iv) industrial[65]. The findings of previous studies have had mixed results so no sector is hypothesised to be better than another (see for example: Ashbaugh et al., 1999; Debreceny et al., 2002; Xiao et al., 2004; Bonsón and Escobar, 2006; Alanezi, 2009; Aly et al., 2010); and the fifth hypothesis is:

***H_5*: Companies in certain sectors in Arab MENA countries will have more IFR.**

7.3.2.2.3 Country

Few studies have examined the effect of country on IFR (Bonsón and Escobar, 2002; Debreceny et al., 2002; Ismail, 2002; Allam and Lymer, 2003; Geering et al., 2003; Joshi and Al-Modhaki, 2003; Bollen et al., 2006; Bonsón and Escobar, 2006). Disclosure of information by companies may differ as a result of differences in culture between countries representing an institutional perspective (Bonsón and Escobar, 2006; Joshi and Al-Modhaki, 2003). Moreover, national normative and legally driven reporting practices could also influence the voluntary IFR disclosure of information (Bonsón and Escobar, 2006). Since the current study is a cross-sectional multi-country study reflecting institutional bias, it is important to examine whether country affects IFR. The effect of country may be such that companies within one country as an organisational field imitate each other (mimetic isomorphism) in order to be in line with each other (DiMaggio and Powell, 1983); as companies operate within contexts shaped by institutions that effect their behaviour and the expectations imposed on them (Turrent and Ariza, 2012). Turrent and Ariza (2012) note that companies operating in countries with similar institutions often tend to adopt identical types of behaviour; and this behaviour may result in these

64. The Real Estate Sector includes real estate and resorts companies.
65. The industrial Sector includes pharmaceutical and medical, chemical, paper and cardboard, printing and packaging, food and beverages, tobacco and cigarettes, mining and extraction, engineering and construction, electrical, textiles, leathers and clothing, and glass and ceramic industries.

companies adopting IFR as a community of practice. Therefore, the differences of IFR among the listed companies in Arab MENA countries could be affected by their country.

Indeed, the majority of the few previous studies have found a significant relationship between IFR and country (Bonsón and Escobar, 2002; Debreceny et al., 2002; Ismail, 2002; Allam and Lymer, 2003; Geering et al., 2003; Bollen et al., 2006). Thus, the current study assumes a significant relationship between IFR and country. The sixth hypothesis is thus:

***H_6*: Companies in certain countries in the Arab MENA region will have more IFR.**

7.3.2.2.4 Region

Region may explain the differences in IFR between Arab MENA countries. The selected countries included in this chapter are from two regions; six countries (GCC) are from the Middle East (Bahrain, Kuwait, Oman, Qatar, Saudi, and UAE) and the other four countries are from North Africa (Egypt, Libya, Morocco, and Tunisia). Mimetic isomorphism may explain the variation in IFR between the two Arab MENA regions; in other words, the companies within one region may imitate each other (DiMaggio and Powell, 1983); and this leads to a community of practice by companies within one region. To the best of the researcher's knowledge, there have not been any previous studies investigating the effect of region on IFR adoption. The current study has the opportunity to examine this relationship by the listed companies in Arab MENA countries; and it assumes to find a significant relationship between IFR adoption and the region. The researcher has assumed a significant relationship because: i) the sample in the current study includes two different regions covering countries that are different politically and economically as shown in Chapter 2; ii) findings from Chapter 6 reveal that IFR in GCC

countries is better than North Africa countries[66]; Therefore, a difference between the two regions is possible. The seventh hypothesis is:

***H_7*: Companies in GCC countries have more IFR than those in North Africa.**

These independent variables are shown in Table 7.2 Panel A (continuous variables) and Panel B (categorical variables)

Table 7.2- Panel A: The Continuous Independent Variables

Variable	Code	Proxy	Expected sign
Company Size	TA	Total Assets ($ '000)	(+)
	MC	Market Capitalisation ($ '000)	
Profitability	PROF	Return on Assets (%)	(+)
		Return on Equity (%)	
Leverage	LEV	Total debt to equity (%)	(+)

Note: this table displays the continuous independent variables and their proxy measures.

Table 7.2- Panel B: The Categorical Independent Variables

Variable	Code	Proxy	Expected sign
Big-4	AUD	1= Audit firm affiliated with one of the Big-4 firms. 0= others.	(+)
Industry Type	IND	1= Financial; 2= services; 3= real estate; and 4= industrial.	N/A
Country	COU	1= Bahrain; 2= Egypt; 3 =Kuwait; 4= Libya; 5= Morocco; 6= Oman; 7= Qatar; 8= Saudi Arabia; 9= Tunisia; and 10= UAE.	N/A
Region	REG	1= GCC 0= NA	(+)

Note: this table displays the categorical independent variables and their proxy measures.

66. The IFR in the selected Arab MENA countries is as follow: GCC countries; Bahrain (98%); Kuwait 77%; Oman (67%); Qatar (88%); Saudi (68%); and the UAE (81%); whereas in the North Africa countries; Egypt (64%); Libya (60%); Morocco (62%); and Tunisia (56%).

7.4 Statistical Analysis

After the data was collected and coded, the second step in the analysis was to choose an appropriate statistical technique. Since the current study investigates the relationship between the above mentioned dependent and independent variables, a statistical regression technique is required (Bourne, 2012). A regression can be used to predict future outcomes based on past data (Field, 2009). As noted in Chapter 5 when the outcome (dependent variable) is a continuous variable, many types of regressions[67] can be used; however, when the outcome is a dichotomous variable, a researcher may use a logistic regression[68] (Field, 2009). Kleinbaum and Klein (2010) define the logistic regression as "a mathematical modelling approach that can be used to describe the relationship of several Xs to a dichotomous dependent variable" (p. 5). Using a particular logistic regression depends on the number of the categorical outcomes, Field (2009) points out that if a researcher tries to predict a relationship of only two categorical outcomes, a binary logistic regression might be used; however, if a researcher tries to predict a relationship of more than two categories, a multinomial logistic regression might be used. The current study seeks to investigate the relationship between the dependent and independent variables of two categorical outcomes (1 or 0), thus, the appropriate statistical technique for this study is the binary logistic regression. Descriptive statistics for the dependent and independent variables are in the next section.

67. A researcher may use simple regression to predict an outcome variable from one predictor variable; or may use multiple regressions to predict several predictor variables.
68. An extension of regression that allows researchers to predict categorical outcomes based on predictor variables.

7.4.1 Descriptive Statistics

For the purpose of the current study, the key descriptive statistics for the 961 Arab MENA listed companies are divided into three parts: i) companies with IFR (IFRC)[69]; ii) companies with a web site but no IFR (N-IFRC); and iii) companies without a web site (N-WEBC) and are compared in five models as shown in Table 7.3

Table 7.3: Descriptive Statistics- Panel A: Dependent Variables

Variable	No. of companies	Total	%
IFR_1	564 companies with IFR (IFRC)	961	59%
	397 companies with no IFR (N-IFRC)/(N-WEB)		41%
IFR_2	564 companies with IFR (IFRC)	850	66%
	286 companies with a web site but no IFR (N-IFRC)		34%
IFR_3	564 companies with IFR (IFRC)	675	84%
	111 companies without a web site (N-WEBC)		16%
WEB_1	850 companies with a web site (IFRC/ N-IFRC)	961	88%
	111 companies without a web site (N-WEBC)		12%
WEB_2	286 companies with a web site but no IFR (N-IFRC)	397	72%
	111 companies without a web site (N-WEBC)		28%

Note: this table shows the number of listed companies regarding each code of the dependent variables.

Table 7.3- Panel B displays descriptive statistics for the continuous independent variables whereas Panel C displays descriptive statistics for the categorical independent variables.

69. A company is classified as IFRC when it provides within its web site i) a comprehensive set of financial statements (including footnotes and the auditors' report); ii) reports partial or summary financial statements; iii) reports financial highlights; iv) has a link to its annual report on a stock exchange in which the company is listed; v) has a link to its annual report elsewhere on the internet.

Table 7.3: Descriptive Statistics- Panel B: Independent Continuous Variables

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	1,894	84,294,562	3,615,352	9,454,883	4.646	25.765
		N-IFRC	4,666	11,395,051	355,515	1,052,671	7.111	60.322
		N-WEBC	4,124	2,740,657	219,871	498,643	3.980	15.797
	MC USD,000	IFRC	1.611	83,801,048	1,430,630	4,708,809	11.213	174.328
		N-IFRC	1,010	22,219,501	289,525	1,441,703	13.236	194.238
		N-WEBC	234	2,658,840	148,339	349,716	5.215	30.711
Profitability	ROA %	IFRC	-88.570	38.610	3.661	9.511	-2.298	20.807
		N-IFRC	-93.130	30.480	2.675	11.546	-2.476	17.361
		N-WEBC	-178.700	33.540	2.179	21.172	-5.840	48.650
	ROE %	IFRC	-186.720	300.480	7.982	24.999	1.216	46.689
		N-IFRC	-360.540	600.340	4.364	48.510	4.448	93.105
		N-WEBC	-130.490	53.890	5.618	24.012	-1.952	9.132
Leverage	LEV	IFRC	-3.711	20.970	.894	1.686	6.043	54.796
		N-IFRC	-10.737	18.747	.715	2.231	3.355	27.966
		N-WEBC	-4.782	8.852	.519	1.477	2.918	15.541

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Table 7.3: Descriptive Statistics- Panel C: Independent Categorical Variables

Variable		No. of companies							
		IFRC	%	N-IFRC	%	N-WEBC	%	Total	
Auditor	Big-4	411	70%	134	23%	40	7%	585	961
	No Big-4	153	41%	152	40%	71	19%	376	
Industrial	Financial	241	73%	68	21%	19	6%	328	961
	Services	104	53%	67	34%	26	13%	197	
	Real Estate	51	55%	29	31%	13	14%	93	
	Industrial	168	49%	122	36%	53	15%	343	
Country	Bahrain	38	85%	6	13%	1	2%	45	961
	Egypt	81	49%	61	37%	25	14%	167	
	Kuwait	109	53%	68	33%	28	14%	205	
	Libya	3	30%	7	70%	0	0%	10	
	Morocco	38	54%	22	31%	11	15%	71	
	Oman	65	58%	34	30%	14	12%	113	
	Qatar	36	86%	5	12%	1	2%	42	
	Saudi Arabia	97	66%	42	29%	8	5%	147	
	Tunisia	18	33%	25	46%	11	21%	54	
	UAE	79	74%	21	20%	7	6%	107	
Region	GCC	424	64%	171	26%	64	10%	659	961
	North Africa	140	46%	115	38%	47	16%	302	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Table 7.3- Panel B shows the descriptive statistics of the continuous independent variables for the three types of company relating to IFR and web sites (see Appendix 7.1 for the descriptive statistics of the independent variables for each country separately). It can be seen that Arab MENA listed companies that have IFR are larger (MEAN-TA= 3.6 billion USD and MEAN-MC= 1.4 billion USD) than those with a web site but no IFR (MEAN-TA= .36 billion USD and MEAN-MC= .29 billion USD) and those without a web site (MEAN-TA= .22 billion USD and MEAN-MC= .15 billion USD); it also shows that companies with IFR are more profitable (MEAN-ROA= 3.661% and MEAN-ROE 7.982%) than those with a web site but no IFR (MEAN-ROA= 2.675% and MEAN-ROE= 4.364%) and those without a web site (MEAN-ROA= 2.179% and MEAN-ROE=5.618%). Moreover, the leverage of the Arab MENA listed companies that have IFR is slightly higher (MEAN-LEV= 0.894) than those with a web site but no IFR (MEAN-LEV= 0.715) and those without a web site (MEAN-LEV= 0.519); although all are high; the maximum leverage of those with IFR is 20.970; and

those with a web site but no IFR is 18.747; both companies operate in the Libyan Financial Sector.

Table 7.3- Panel C shows that 411 companies have IFR and their financial statements are audited by one of the Big-4 firm; compared to 153 companies with IFR but are not audited by one of the Big-4 firms. Table 7.3- Panel C also shows that the number of listed companies that have or do not have IFR by sector, country, and region are different; for instance, the industrial sector has the largest number of companies, but the financial sector has the best IFR adoption. Furthermore, the table shows that 659 out of 961 listed companies are located in the Middle East region (GCC countries) and 424 (64%) of which with IFR comparing to listed companies that are located in North Africa (302 companies) with only 140 (46%) companies engaging in IFR. This indicates that IFR practice in the GCC countries is better than North African countries.

Once the data is collected, it is very useful for a researcher to know whether the data is normally distributed or not. A normal distribution means the data is distributed symmetrically around the centre of all scores (Field, 2009). Skewness[70] means lack of symmetry and Kurtosis[71] means pointedness, and are the two main ways in which a distribution can deviate from normal (Field, 2009). From Table 7.3- Panel B, it can be seen that the Skewness and Kurtosis for all the continuous variables indicate that not all these variables are distributed normally. However, the assumptions of the logistic regression differ from the assumptions of regressions that require normally distributed data; the logistic regression does not require normally distributed variables, and it does not assume linearity in the relationship between the covariates and the outcome variable. It also does not assume homoscedasticity (Peng et al., 2002; Peng and So, 2002; Field, 2009; Sarkar et al., 2011). In general, it has less stringent

[70.] The Skewness for data with normal distribution is zero.
[71.] The Kurtosis for data with normal distribution is 3.

requirements than linear regression models. However, like a normal regression, the logistic regression assumes that predictors should not be too highly correlated; this can be checked with correlation coefficient, the Tolerance and VIF (Variance Inflation Factor) statistics (see Section 7.4.2). The logistic regression requires that all observations be independent and that the independent variables be linearly related to the logit of the dependent variable (Field, 2009). As in other regressions, outliers can affect the results significantly. Standardised residuals for outliers should be analysed and removed or modelled separately. Standardised residuals greater than 2.58 are outliers at the level 1%, which is the customary level (Garson, 2012). Moreover, Garson (2012) mentions that a researcher may check influential cases that affect the results; he reveals that a case is identified as influential if its Cook's distance is greater than 1.0.

7.4.2 Correlation

To assess whether the independent variables are associated with each other, a correlation matrix was performed. Pearson's correlation coefficient and Spearman's correlation coefficient are the two correlations used for this purpose; if the data is not normally distributed, it is better to use Spearman's correlation coefficient (Sprent and Smeeton, 2001; Field, 2009). Guerreiro et al. (2012) mention that when data consists of continuous dependent and independent variables, a researcher may use a Pearson's correlation; if dependent and independent variables are mixed (continuous and categorical variables), a researcher may use Spearman's correlation; and when both dependent and independent variables are categorical (dummies), a researcher may use Cramers' correlation. Since the dependent and independent variables in this study are mixed (continuous and categorical), Spearman's correlation coefficient was performed for all the independent variables as shown in Table 7.4; the Pearson correlation was only performed for the continuous independent variables and are shown in Appendix 7.2. Dancey and Reidy (2004) report that the best situation is when the

independent variables are highly correlated with the dependent variable, but not with each other. They also report that variables are highly correlated with each other when the correlations are 0.8 or above and in those cases multicollinearity[72] may exist.

Table 7.4: Spearman's Correlation Coefficient of the Independent Variables

	TA	MC	ROA	ROE	LEV	AUD	IND	COU	REG
SIZE (TA)	1								
SIZE (MC)	**.858****	1							
PROF (ROA)	**-.141****	**.086****	1						
PROF (ROE)	.058	**.212****	**.847****	1					
LEV	**.418****	**.200****	**-.260****	-.061	1				
AUD	**.363****	**-.347****	.045	-.035	**-.131****	1			
IND	**-.279****	**-.137****	**.309****	**.144****	**-.112****	**-.286****	1		
COU	**.143****	**.175****	-.039	.012	.020	**-.224****	**-.069***	1	
REG	**.144****	**.113****	**-.180****	**-.246****	-.028	**.266****	**.177****	**.343****	1

Note: **= Correlation is significant at the 1% level (2-tailed); *= Correlation is significant at the 5% level (2-tailed).

Table 7.4 shows that some of the independent variables are correlated with each other. It shows that TA is highly correlated with MC (0.858**), and ROA is highly correlated with ROE (0.847**); however, these independent variables will not be used in the same model; in other words, both TA and MC variables are proxies of size and both ROA and ROE variables are proxies of profitability; thus, they will be used separately in two different models.

Overall, it can be seen that the association between all the independent variables (whether Spearman correlation coefficient or Pearson correlation coefficient) does not show any particular multicollinearity problem. To ensure that this problem does not exist, the variance inflation factor (VIF) and Tolerance will be checked. Field (2009) suggests that if a VIF value is greater than 10, there is cause for concern about the existence of multicollinearity; he also suggests that multicollinearity can be checked by a Tolerance value that, if it is less than 0.1, almost certainly indicates a serious multicollinearity problem. The Tolerance and VIF values

[72.] Multicollinearity is considered as a serious problem in the multiple regressions when two or more independent variables are highly correlated between each other in the same regression model (Field, 2009).

for all independent variables are shown later in the binary regression for different models. The next section discusses the univariate analysis between the first dependent variable and the independent variables employed in the current thesis.

7.5 Univariate Analysis

In order to determine the statistical significance of the differences across companies with IFR and companies without IFR, two-independent-samples test **(**Mann-Whitney) was utilised. Table 7.5 displays results of Mann-Whitney test for all independent variables. Table 7.6 displays results of Mann-Whitney test for comparing each pair of sectors together; and Table 7.7 displays the results of the Mann-Whitney test that compares each pair of countries together. All the above mentioned tables use the first dependent variable IFR_1 (see Appendix 7.3: Panel A, Panel B, Panel C, and Panel D; Appendix 7.4: Panel A, Panel B, Panel C, and Panel D; and Appendix 7.5: Panel A, Panel B, Panel C, and Panel D for univariate analysis between the other dependent variables (IFR_2, IFR_3, WEB_1, and WEB_2) and the independent variables).

Table 7.5: Mann-Whitney Test

Variable		IFR_1	N	Mean Rank	significance
Size	TA	With IFR	564	592.39	**0.000****
		No IFR	397	322.75	
	MC	With IFR	559	577.96	**0.000****
		No IFR	394	333.76	
Profitability	ROA	With IFR	564	483.49	0.690
		No IFR	396	476.24	
	ROE	With IFR	563	501.42	**0.004****
		No IFR	396	449.55	
Leverage	LEV	With IFR	562	526.51	**0.000****
		No IFR	397	414.16	
Auditor	AUD	With IFR	564	538.65	**0.000****
		No IFR	397	399.10	
Industrial Type	IND	With IFR	564	436.07	**0.000****
		No IFR	397	544.83	
Country	COU	With IFR	564	497.36	**0.028***
		No IFR	397	457.76	
Region	REG	With IFR	564	512.73	**0.000****
		No IFR	397	435.93	

Note: **= significant at the 1% l level (2-tailed); *= significant at the 5% level (2-tailed); IFR_1= grouping variable.

Table 7.5 shows that in relation to the first dependent variable there are significant differences between companies with IFR and companies without IFR, except ROA (p= 0.690). This preliminarily supports Hypotheses 1, 3, 4, 5, 6, and 7. However, Hypothesis 2 (profitability) is supported by using ROE only as proxy not ROA.

Follow-up tests are required to evaluate pairwise differences among the four sectors as well as the ten countries as shown in Table 7.6 and Table 7.7. Table 7.6 shows significant differences between the financial sector and each of the services, real estate, and industrial sectors. Further, it indicates that there is no difference between services and real estate and industrial; or between real estate and industrial sector. This indicates that Financial Sector is different from the other three sectors and supports the results obtained from Chapter 6.

Table 7.6: Mann-Whitney Test for Industrial Sector Variable

	Financial	Services	Real Estate	Industrial
Financial				
Services	**.000****			
Real Estate	**.001****	.745		
Industrial	**.000****	.394	.317	

Note: this table shows differences between sectors regarding IFR_1; **= difference is significant at the 1% level. The grouping variable for this test is IFR_1.

Table 7.7 displays the findings of Mann-Whitney test between Arab MENA countries. It reveals that Bahrain has significant differences (7 differences) with the other countries except Qatar and UAE. The table also shows that Qatar differs significantly from the others (7 differences) except Bahrain and UAE. Further, the findings reveal that UAE differs significantly from the other countries (6 differences) except Bahrain, Saudi, and Qatar. Saudi also differs significantly from the other countries (6 differences) except Morocco, Oman, and UAE. It is worth mentioning that these four countries are part of GCC countries indicating that at least there is no difference between four countries of the GCC. On the other hand, the table shows that there is no difference between the North African countries; for instance, the table shows that there is no difference between Tunisia and Egypt or between Tunisia and Libya. However, Tunisia differs significantly (at 5% level) from Morocco[73].

[73.] Tunisia differs significantly from the GCC countries at 1% level.

Table 7.7: Mann-Whitney Test for Country Variable

	Bahrain	Egypt	Kuwait	Libya	Morocco	Oman	Qatar	Saudi	Tunisia	UAE
Bahrain										
Egypt	**.000****									
Kuwait	**.000****	.371								
Libya	**.000****	.256	.153							
Morocco	**.001****	.480	.959	.166						
Oman	**.001****	.139	.456	.095	.596					
Qatar	.869	**.000****	**.000****	**.000****	**.001****	**.001****				
Saudi	**.018***	**.002****	**.016***	**.022***	.076	.164	**.014***			
Tunisia	**.000****	.052	**.010****	.838	**.025***	**.004****	**.000****	**.000****		
UAE	.157	**.000****	**.000****	**.004****	**.005****	**.011***	.121	.182	**.000****	
Total of Differences	7	4	5	4	4	4	7	6	7	6

Note: this table shows differences between selected Arab MENA countries regarding IFR_1; **= difference is significant at the 1% level; *= difference is significant at the 5% level; the test variable of this test is IFR_1.

Further to the univariate analysis that shows significant differences between companies with IFR and companies without IFR as well as significant differences among sectors and among Arab MENA countries, a multivariate logistic regression is utilised as discussed in the next section.

7.6 Multivariate Analysis

Multivariate analysis using Binary Logistic Regression is employed to test the developed research hypotheses. Such an analysis is undertaken to examine the relationship between IFR adoption and the explanatory variables (independent variables). Two models are included for the different proxies of size and profitability; TA and ROA in one model, and MC and ROE in the other. Since this study includes five tests of the dependent variables, ten models will be tested. The results are discussed and analysed under the theoretical framework adopted and conclusions are drawn from the statistical findings. The following section shows the different regression models of this study.

7.6.1 Binary Logistic Regression Models

As mentioned above there are two proxies of size (Total Assets and Market Capitalisation), and two proxies of profitability (Return on Assets and Return on Equity). Therefore, two binary logistic models for each dependent variable (Model A and Model B) were identified incorporating the independent variables that are used in examining the developed hypotheses. The following equation represents the two-logit models:

$$Y_i = \alpha + \beta_1(\text{SIZE}) + \beta_2\ (\text{PROF}) + \beta_3\ (\text{LEV}) + \beta_4\ (\text{AUD}) + \beta_5\ (\text{IND}) + \beta_6\ (\text{COU}) + \beta_7\ (\text{REG}) + e.$$

Where the covariates are:

Y	= dependent variable: 1 or 0; and depends on the dependent variable in the equation.
i	= company identifier
α	= the Y intercept (constant)
β	= the slope of the parameter (logistic coefficient)
Size	= total assets, market capitalisation
Profitability	= return on assets, return on equity
Leverage	= total debt to equity ratio
Auditor	= type of auditor
Industry	= industrial sector (4 sectors)
Country	= country (10 countries)
Region	= region (2 regions)
e	= error term

The above mentioned covariates are split into Model A and Model B. Model A uses total assets for size and ROA for profitability; Model B uses market capitalisation for size and ROE for profitability; and every model takes a number from 1 to 5 as a reference to the dependent variables.

As mentioned earlier, assumptions of binary regression do not require data to be normally distributed; therefore, independent variables were not subjected to a log transformation;

however, regressions models with logarithm transformation were performed to check the robustness of the models and results will be compared and discussed later.

Using the Statistical Package for Social Sciences 19 (SPSS 19), the case-processing summary showed that the number of observations differs from one model to another; this is because the dependent variables differ from one model to another and because SPSS drops a case if it includes a missing value or cases were excluded because of outliers. By using the –enter method (a standard method), the models include all of the 7 independent variables being entered into the equation at once and a probability of $P \leq 0.05$ is included in the models.

The categorical variables (Auditor, Industry, Country, and Region) were transformed into dummy variables. For industry the comparison is against "Industrial Sector" and for country, the omitted dummy variable is "UAE". The regression analysis results of the binary logistic regression are discussed in the next section.

7.6.2 Binary Logistic Regression Analysis Results

Table 7.8 (Model A_1) and Table 7.9 (Model B_1) report the logistic regression analysis results for the Arab MENA listed companies by using the first dependent variable (IFR_1: 1= if a company has IFR; 0= if a company has no IFR irrespective of whether it has a web site or not).

Table 7.8: Binary Logistic Regression Analysis – Model A_1

	β	S.E	Sig.	Tolerance	VIF
Size (TA)	.000	.000	**.000****	.896	1.116
Profitability (ROA)	.018	.008	**.014***	.910	1.098
Leverage	.012	.060	.847	.930	1.075
Auditor	.510	.167	**.002****	.826	1.210
Sector			**.013***	.823	1.216
Sector (FIN)	.557	.210	**.008****		
Sector (SERV)	-.141	.211	.505		
Sector (REAEST)	.135	.281	.629		
Country			**.001****	.876	1.142
Country (BAH)	1.126	.511	**.028***		
Country (EGY)	-.359	.315	.254		
Country (KUW)	-.147	.304	.629		
Country (LIB)	-6.349	4.696	.176		
Country (MOR)	-.449	.371	.225		
Country (OMA)	.093	.327	.776		
Country (QAT)	.745	.575	.195		
Country (SAU)	-.030	.316	.925		
Country (TUN)	-1.373	.448	**.002****		
Region	.626	.170	**.000****	.822	1.217
Constant	-.602	.295	**.041***		
Chi-square	279.035		**.000****		
Cox and Snell R square	.254				
Negelkerke R square	.342				
Correctly predicted: IFRC	76.2%				
Correctly predicted: N-IFRC	64.9%				
Overall correctly classified	71.5%				
Number of observations[74]	952				

Note: **=p ≤ 0.01 and *=p ≤ 0.05; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

The logistic regression model incorporated both the first dependent variable (IFR_1) and the independent variables listed in Table 7.1, which were used to examine the statistical relationship between IFR adoption and the independent variables. Table 7.8 shows the results from the logistic binary regression (Model A_1) which indicates that size (TA) is statistically significant at 1% level with IFR_1; this means that larger companies are more likely to adopt IFR than smaller companies. This finding and the other findings from the above table will be

[74.] Number of observations refers to the number of cases that were included in the analysis; the difference (nine) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases.

linked back to the literature and the institutional theory framework in the discussion section later. The table also shows that profitability (ROA) is statistically significant at 5% level; this indicates that more profitable companies are more likely to adopt IFR. The third hypothesis assumes a significant relationship between leverage and IFR; however, the findings from Table 7.8 reveal that leverage is not associated (P= .847) with IFR_1. Based on this result, the third hypothesis is not supported; but based on the sign the table shows that leverage is in the right direction so higher leverage companies have more IFR. Furthermore, the table shows that auditor is significantly associated at 1% level with IFR_1; and Industrial sector is found to be significant at 5% level with the Financial Sector being significantly different from the Industry Sector (reference sector); whereas there is no difference between the Industry Sector and the other two sectors (Services Sector and Real Estate Sector); the positive sign indicates that the Financial Sector is the best among the sectors and supports the findings from the univariate analysis and the findings from Chapter 6. Although not significant, the Services Sector is the worst with a negative sign. Moreover, the table provides strong evidence (significant at 1% level) that country affects IFR adoption,. Bahrain is significantly better than UAE (reference country) and Tunisia is significantly worse (negative sign). Indeed, six of the nine countries have a negative β and only Bahrain, Oman and Qatar are better than UAE, which are all GCC countries. The last variable (region) also was found to be significant at 1% level; this indicates the existence of a difference between Middle East countries (GCC) and North Africa countries which again GCC being for better IFR. Based on the findings from the above table, all the hypotheses were accepted except H_3 that assumes a significant relationship between leverage and IFR adoption which is rejected.

The Chi-square statistic indicates that the model is significant ($p< .01$). The findings of the logistic regression (Model A_1) indicate that the model accurately predicted 76.2% of the companies that adopted IFR and 64.9% of companies that do not have IFR to give an overall prediction of 71.5%.

In a standard regression, the R^2 gives an idea of the model power in predicting the variable/s of interest. A model has a very strong prediction when R^2 is close to one, whereas a small R^2 indicates to a weak relationship. In logistic regression, there is no direct equivalent of R^2; however, statisticians have come up with several R-like measures for logistic regression. The Cox and Snell R^2, which is 0.254 in this study, and Negelkerke R^2, which is 0.342 in this study, are two examples for logistic regression; both Cox and Sell R^2 and Negelkerke R^2 are comparable. These statistics attempt to quantify the proportion of variation explained in the logistic regression model[75]. The Tolerance and VIF for all variables indicate that multicollinearity problem is not a problem; the lowest Tolerance value is .822 (compared to .1) and the highest VIF 1.217 (compared to 10).

As mentioned above, Model B uses MC as a proxy of size and ROE as a proxy of profitability. The regression analysis results of binary logistic regression (Model B_1) differ from Model A_1 as shown in Table 7.9.

[75]. The Cox and Snell R^2 was modified by Nagelkerke R^2 because the first cannot achieve a maximum value of one, whereas Nagelkerke's R^2 can achieve this value.

Table 7.9: Binary Logistic Regression Analysis – Model B_1

	β	S.E	Sig.	Tolerance	VIF
Size (MC)	.000	.000	**.000****	.967	1.035
Profitability (ROE)	.008	.004	**.025***	.885	1.131
Leverage	.133	.058	**.021***	.874	1.145
Auditor	.531	.168	**.002****	.832	1.201
Sector			**.000****	.875	1.143
Sector (FIN)	.812	.201	**.000****		
Sector (SERV)	-.013	.213	.951		
Sector (REAEST)	.308	.278	.268		
Country			**.000****	.884	1.132
Country (BAH)	.775	.491	.115		
Country (EGY)	-.520	.301	.084		
Country (KUW)	-.467	.288	.105		
Country (LIB)	-2.888	1.055	**.006****		
Country (MOR)	-.774	.355	**.029***		
Country (OMA)	-.350	.315	.267		
Country (QAT)	.329	.529	.534		
Country (SAU)	-.382	.306	.213		
Country (TUN)	-1.450	.404	**.000****		
Region	.597	.170	**.000****	.832	1.203
Constant	-.514	.292	**.000****		
Chi-square	258.089		**.000****		
Cox and Snell R square	.239				
Negelkerke R square	.322				
Correctly predicted: IFRC	83.8%				
Correctly predicted: N-IFRC	77.3%				
Overall correctly classified	71.7%				
Number of observations[76]	944				

Note: **=$p \leq 0.01$ and *=$p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

Model B_1 shows slightly different results from Model A_1[77]. Consistent with Model A_1, size, profitability, auditor, country, and region are found to be statistically significant at the same levels (1%). Unlike Model A_1 where industrial sector is significant at 5% level, it is significant at 1% level in Model B_1. Furthermore, leverage is found to be significant at 5%

[76.] Number of observations refers to the number of cases that were included in the analysis; the difference (17) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases.

[77.] The findings of both models (A_1 and B_1) will be linked back to literature and the institutional theory framework in the discussion section.

level where it is insignificant in Model A_1. Factors in Model B_1 have more explanatory power on IFR than Model A_1 due to the different proxies used in this model. The current study is a multi-country study; and using total assets and ROA as proxies for size and profitability may be complicated by the effect of differing accounting treatments on asset measurement and revaluation in the countries in the study (Debreceny et al., 2002).

By looking at Model B_1, it can be seen that there are significant differences between UAE (country reference) and Libya (P=0.006), Morocco (P=0.029), Tunisia (P= 0.000) and to some extent with Egypt (P= 0.084); and there is no significant difference between the GCC countries. Although Tunisia is still the worst country, and Libya and Morocco are still poor, they are now significant, providing a stronger result than under Model A_1. The signs of the coefficients show that IFR by GCC listed companies is better than North African listed companies.

The findings of Model B_1 indicate that the model accurately predicted 83.8% of companies that have adopted IFR and 77.3% of companies without IFR to give overall percentage of 71.7%; and again these findings are consistent with Model A_1 in general.

As mentioned above, the R^2 has no meaning in a logistic regression; however, in Model B_1, the Cox and Snell R^2 (.239), and Negelkerke R^2 (.322) are both a bit lower than Model A_1.

The Tolerance and VIF for all variables indicate that multicollinearity is not a problem; the lowest Tolerance value is .832 (compared to .1) and the highest VIF 1.203 (compared to 10).

The above mentioned models (A_1 and B_1) investigated the factors that may affect Arab MENA listed companies in adopting IFR; however, running the binary logistic regression for both models using natural logarithm for the continuous variables (size, profitability, and leverage) gives similar results (see Appendix 7.6: Panel A-Model C_1; and Panel B-Model D_1). In Model C_1; LNTA is a proxy of size and LNROA is a proxy for profitability; and in

Model D_1; LNMC is a proxy of size and LNROE is a proxy of profitability. Most variables affect IFR and this will be discussed in Section 7.7.

Further, MC and ROA and TA and ROE (as well as LNMC and LNROA and LNTA and LNROE) were substituted and rerun to check for robustness whether the results are different. The findings reveal that there is little difference; and that most variables affect IFR (see Appendix 7.7: Panel A, Panel B, Panel C, and Panel D).

The current study next investigates having or not having IFR between only companies that have a web site, with the dependent variable IFR_2 where 1 = IFR, and 0 = no IFR. Tables 7.10 and 7.11 display the results of the two models (A_2 and B_2) using the second dependent variable.

Table 7.10: Binary Logistic Regression Analysis – Model A_2

	β	S.E	Sig.	Tolerance	VIF
Size (TA)	.000	.000	**.000****	.909	1.101
Profitability (ROA)	.023	.009	**.011***	.895	1.118
Leverage	-.006	.065	.931	.935	1.070
Auditor	.362	.186	.052	.815	1.227
Sector			.052	.810	1.235
Sector (FIN)	.480	.232	**.039***		
Sector (SERV)	-.195	.231	.399		
Sector (REAEST)	.053	.308	.864		
Country			**.009****	.859	1.165
Country (BAH)	20.298	5954.896	.997		
Country (EGY)	-.328	.345	.341		
Country (KUW)	-.096	.334	.773		
Country (LIB)	-8.716	2.655	**.001****		
Country (MOR)	-.344	.409	.400		
Country (OMA)	.150	.358	.676		
Country (QAT)	.706	.626	.259		
Country (SAU)	-.156	.339	.646		
Country (TUN)	-1.276	.483	**.008****		
Region	.576	.183	**.002****	.805	1.242
Constant	-.722	.190	**.000****		
Chi-square	223.713		**.000****		
Cox and Snell R square	.243				
Negelkerke R square	.337				
Correctly predicted: IFRC	86.4%				
Correctly predicted: N-IFRC	43.3%				
Overall correctly classified	71.9%				
Number of observations[78]	841				

Note: **=p ≤ 0.01 and *=p ≤ 0.05; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

The results obtained from Model A_2 are only slightly different from Model A_1. In both models, size (TA), country, and the region are significant at the 1% level but the sector variable is significant at 5% level in Model A_1 and insignificant (p= 0.052) in Model A_2 although the Financial sector is still significantly different within sector classifications. Profitability (ROA) is significant at the 5% level in both models; and leverage is insignificant

[78] Number of observations refers to the number of cases that were included in the analysis; the difference (120) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, influential cases, or because of the dependent variable (IFR_2) in this model which excludes companies without web sites.

in both models. Auditor is no longer significant, showing that the Big-4 clients are more likely to have web sites than those audited by the non-Big-4. Thus, as an institutional feature, the Big-4 may advise their clients to have a web site. For country, both Libya and Tunisia are again the worst for IFR, even for all those companies with a web site.

The Tolerance and VIF for all variables indicate that multicollinearity problem does not exist; the lowest Tolerance value is 0.762 (compared to .1) and the highest VIF 1.313 (compared to 10).

The next table displays results of Model B_2, which includes the second dependent variable (IFR_2) and differs from Model A_2 where market capitalisation is used for size and return on equity is used for profitability.

Table 7.11: Binary Logistic Regression Analysis – Model B_2

	β	S.E	Sig.	Tolerance	VIF
Size (MC)	.000	.000	**.000****	.964	1.038
Profitability (ROE)	.010	.004	**.011***	.913	1.095
Leverage	.144	.065	**.027***	.913	1.096
Auditor	.444	.184	**.016***	.820	1.220
Sector			**.005****	.876	1.141
Sector (FIN)	.648	.218	**.003****		
Sector (SERV)	-.125	.230	.587		
Sector (REAEST)	.236	.300	.431		
Country			**.001****	.872	1.146
Country (BAH)	2.383	1.055	**.024***		
Country (EGY)	-.515	.337	.127		
Country (KUW)	-.370	.322	.251		
Country (LIB)	-4.104	1.370	**.003****		
Country (MOR)	-.739	.404	.067		
Country (OMA)	-.192	.353	.586		
Country (QAT)	.429	.622	.491		
Country (SAU)	-.591	.336	.078		
Country (TUN)	-1.320	.443	**.003****		
Region	.517	.181	**.004****	.812	1.231
Constant	-.209	.182	.250		
Chi-square	187.921		**.000****		
Cox and Snell R square	.202				
Negelkerke R square	.280				
Correctly predicted: IFRC	85.8%				
Correctly predicted: N-IFRC	41.8%				
Overall correctly classified	71.0%				
Number of observations[79]	835				

Note: **=p ≤ 0.01 and *=p ≤ 0.05; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

The results obtained from Model B_2 (using the second dependent variable IFR_2) are similar to Model B_1 (using the first dependent variable IFR_1) except for two differences. In both models, size (MC), sector, country, and region are significant at the 1% level. Profitability (ROE) and leverage are significant at 5% level in both models.

79. Number of observations refers to the number of cases that were included in the analysis; the difference (126) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases; or excluded because of the dependent variable (IFR_2) in this model which excludes companies without web sites.

In addition to the two dependent variables investigated above, the other three tests (see Table 7.1) with six models were investigated in this study. Tables from 7.12 to 7.17 display the results of the six models (see Appendix 7.8 for results of the six models with logarithms for the continuous variables). The next model includes the third dependent variable (IFR_3) where 1= IFR and 0= no web site and hence no IFR.

Table 7.12: Binary Logistic Regression Analysis – Model A_3

	β	**S.E**	**Sig.**	**Tolerance**	**VIF**
Size (TA)	.000	.000	**.000****	.868	1.151
Profitability (ROA)	.011	.009	.194	.914	1.094
Leverage	.065	.109	.549	.914	1.094
Auditor	.813	.259	**.002****	.822	1.217
Sector			.054	.841	1.189
Sector (FIN)	.908	.349	**.009****		
Sector (SERV)	.046	.313	.884		
Sector (REAEST)	.271	.421	.521		
Country			.190	.877	1.140
Country (BAH)	-.012	.647	.985		
Country (EGY)	-.066	.519	.898		
Country (KUW)	-.135	.501	.788		
Country (LIB)	18.555	24550.229	.999		
Country (MOR)	-.407	.585	.487		
Country (OMA)	.132	.546	.809		
Country (QAT)	18.344	5767.152	.997		
Country (SAU)	.747	.583	.201		
Country (TUN)	-1.307	.645	**.043***		
Region	.539	.251	**.032***	.839	1.192
Constant	.212	.495	.668		
Chi-square	129.252		**.000****		
Cox and Snell R square	.179				
Negelkerke R square	.300				
Correctly predicted: IFRC	99.1%				
Correctly predicted: N-IFRC	8.2%				
Overall correctly classified	83.8%				
Number of observations[80]	656				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

80. Number of observations refers to the number of cases that were included in the analysis; the difference (305) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases; or excluded because of the dependent variable (IFR_3) that excludes companies with a web site but do not have IFR.

By looking at Table 7.12 and focusing on the main findings, it can be seen that size (TA; p= 0.000), auditor (p= 0.002), and region (p= 0.032) are the only explanatory variables in this model. Thus excluding companies with a web site but no IFR from the original model A_1, profitability, sector, and country are not significant. The next model uses the same mix of dependent variables with different proxies of size (MC) and profitability (ROE) as shown in Table 7.13.

Table 7.13: Binary Logistic Regression Analysis – Model B_3

	β	**S.E**	**Sig.**	**Tolerance**	**VIF**
Size (MC)	.000	.000	**.000****	.929	1.076
Profitability (ROE)	.002	.006	.719	.902	1.108
Leverage	.145	.111	.192	.939	1.064
Auditor	.728	.263	**.006****	.830	1.205
Sector			**.008****	.873	1.145
Sector (FIN)	1.120	.340	**.001****		
Sector (SERV)	.147	.318	.644		
Sector (REAEST)	.429	.418	.305		
Country			.301	.880	1.137
Country (BAH)	-.106	.644	.869		
Country (EGY)	-.150	.515	.772		
Country (KUW)	-.244	.495	.623		
Country (LIB)	18.053	20200.625	.999		
Country (MOR)	-.682	.591	.249		
Country (OMA)	.080	.543	.883		
Country (QAT)	17.971	5397.920	.997		
Country (SAU)	.333	.589	.572		
Country (TUN)	-1.392	.635	**.028***		
Region	.502	.252	**.047***	.830	1.205
Constant	.149	.495	.764		
Chi-square	137.007		**.000****		
Cox and Snell R square	.187				
Negelkerke R square	.316				
Correctly predicted: IFRC	98.2%				
Correctly predicted: N-IFRC	6.4%				
Overall correctly classified	83.1%				
Number of observations[81]	661				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

81. Number of observations refers to the number of cases that were included in the analysis; the difference (300) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases; or excluded because of the dependent variable (IFR_3) that excludes companies with a web site but do not have IFR.

The findings obtained from Model B_3 are similar to the findings obtained from Model A_3 except that industrial sector is significant in Model B_3 whereas it is not so in Model A_3 indicating that the explanatory variables in Model B_3 are more powerful than the ones in Model A_3 using different proxies for size and profitability. Table 7.13 shows that size (MC), auditor, and sector are significant at 1% level; and region variable is significant at 5% level.

The next model as shown in Table 7.14 displays the results from the binary regression model that compares companies with a web site to companies without a web site at all with total assets as a proxy of size and ROA as proxy of profitability.

Table 7.14: Binary Logistic Regression Analysis – Model A_4

	β	S.E	Sig.	Tolerance	VIF
Size (TA)	.000	.000	**.005****	.868	1.151
Profitability (ROA)	.009	.007	.237	.914	1.094
Leverage	.034	.076	.652	.914	1.094
Auditor	.643	.238	**.007****	.822	1.217
Sector			.286	.841	1.189
Sector (FIN)	.615	.323	.057		
Sector (SERV)	.111	.281	.694		
Sector (REAEST)	.097	.375	.796		
Country			.596	.877	1.140
Country (BAH)	-.646	.620	.298		
Country (EGY)	-.131	.477	.784		
Country (KUW)	-.179	.473	.705		
Country (LIB)	18.551	11694.651	.999		
Country (MOR)	-.501	.535	.349		
Country (OMA)	-.059	.507	.907		
Country (QAT)	18.099	5674.079	.997		
Country (SAU)	.514	.549	.349		
Country (TUN)	-.665	.554	.230		
Region	.308	.228	.176	.839	1.192
Constant	.962	.208	**.000****		
Chi-square	83.432		**.000****		
Cox and Snell R square	.084				
Negelkerke R square	.164				
Correctly predicted: IFRC	100%				
Correctly predicted: N-IFRC	.9%				
Overall correctly classified	88.6%				
Number of observations[82]	952				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

Table 7.14 shows the findings of binary regression between WEB_1 and the independent variables. Only two variables, size and auditor, are significantly associated at 1% level with IFR. This indicates that larger companies and companies that are audited by one of the Big-4 auditing firms are likely to have a web site. Sector, country and region do not impact on whether a company has a web site or not, hence the IFR results in the previous models that

82. Number of observations refers to the number of cases that were included in the analysis; the difference (Nine) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values.

are affected by these factors are confirmed. Thus IFR is affected strongly by national and regional communities of practice and isomorphic processes.

The next model as shown in Table 7.15 investigates the relationship between companies with a web site to companies without a web site using MC for size and ROE for profitability.

Table 7.15: Binary Logistic Regression Analysis – Model B_4

	β	**S.E**	**Sig.**	**Tolerance**	**VIF**
Size (MC)	.000	.000	**.001****	.946	1.057
Profitability (ROE)	.000	.003	.895	.881	1.135
Leverage	.067	.086	.433	.872	1.147
Auditor	.587	.240	**.014***	.826	1.211
Sector			.108	.875	1.143
Sector (FIN)	.769	.316	**.015***		
Sector (SERV)	.173	.283	.540		
Sector (REAEST)	.138	.373	.711		
Country			.772	.885	1.129
Country (BAH)	-.680	.619	.272		
Country (EGY)	-.149	.478	.755		
Country (KUW)	-.254	.469	.588		
Country (LIB)	18.514	12026.092	.999		
Country (MOR)	-.637	.537	.236		
Country (OMA)	-.030	.509	.952		
Country (QAT)	17.832	5370.482	.997		
Country (SAU)	.198	.553	.720		
Country (TUN)	-.646	.551	.241		
Region	.250	.227	.270	.834	1.199
Constant	.860	.215	**.000****		
Chi-square	86.776		**.000****		
Cox and Snell R square	.088				
Negelkerke R square	.172				
Correctly predicted: IFRC	100%				
Correctly predicted: N-IFRC	0				
Overall correctly classified	88.5%				
Number of observations[83]	945				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

83. Number of observations refers to the number of cases that were included in the analysis; the difference (16) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values.

Table 7.15 shows that results from Model B_4 are identical to the results from Model A_4 with different levels. Size (MC) in both models is significant at 1% level; however, auditor is significant at 1% level in Model A_4 whereas it is significant at 5% level in Model B_4. This indicates that larger companies and those are audited by one of the Big-4 auditing firms are likely to have a web site.

The next model (A_5) as shown in Table 7.16 includes the findings of the binary regression where the dependent variable in this model is: 1= companies with a web site but no IFR; and 0= companies without a web site; and size was measured by TA and profitability was measured by ROA.

Table 7.16: Binary Logistic Regression Analysis – Model A_5

	β	S.E	Sig.	Tolerance	VIF
Size (TA)	.000	.000	.722	.903	1.108
Profitability (ROA)	.005	.008	.566	.895	1.117
Leverage	.023	.071	.744	.865	1.156
Auditor	.407	.258	.115	.900	1.111
Sector			.886	.868	1.152
Sector (FIN)	.200	.354	.571		
Sector (SERV)	.194	.313	.536		
Sector (REAEST)	-.024	.404	.953		
Country			.941	.906	1.104
Country (BAH)	-22.273	16347.374	.999		
Country (EGY)	-.124	.509	.808		
Country (KUW)	-.164	.514	.750		
Country (LIB)	20.030	15102.032	.999		
Country (MOR)	-.474	.578	.412		
Country (OMA)	-.242	.550	.659		
Country (QAT)	19.996	17771.524	.999		
Country (SAU)	.471	.588	.423		
Country (TUN)	-.264	.585	.652		
Region	.075	.244	.094	.838	1.194
Constant	.789	.465	.090		
Chi-square	32.807		**.008****		
Cox and Snell R square	.080				
Negelkerke R square	.115				
Correctly predicted: IFRC	100%				
Correctly predicted: N-IFRC	6.4%				
Overall correctly classified	73.9%				
Number of observations[84]	394				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

The results obtained from Table 7.16 reveal that none of the independent variables included in this study are associated with having a web site and no IFR or no web site at all and hence no IFR. Comparing the findings of this model to previous models that have the same proxies, it can be seen that there is little difference between companies with no IFR, irrespective of

84. Number of observations refers to the number of cases that were included in the analysis; the difference (567) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values or excluded because of the dependent variable (WEB_2) that excludes companies with a web site and IFR.

whether they have a web site or not. Thus, those with no IFR have formed a community of practice between themselves.

The next model as shown in Table 7.17 examines the relationship between companies with a web site but no IFR and companies without a web site using MC as proxy of size and ROE as proxy of profitability.

Table 7.17: Binary Logistic Regression Analysis – Model B_5

	β	**S.E**	**Sig.**	**Tolerance**	**VIF**
Size (MC)	.000	.000	.589	.988	1.012
Profitability (ROE)	.000	.003	.971	.826	1.210
Leverage	.024	.080	.768	.783	1.277
Auditor	.391	.259	.131	.901	1.110
Sector			.850	.905	1.105
Sector (FIN)	.213	.340	.531		
Sector (SERV)	.198	.314	.527		
Sector (REAEST)	-.068	.401	.866		
Country			.961	.914	1.095
Country (BAH)	-22.216	16344.355	.999		
Country (EGY)	-.102	.510	.842		
Country (KUW)	-.158	.512	.757		
Country (LIB)	20.102	15142.553	.999		
Country (MOR)	-.437	.581	.452		
Country (OMA)	-.189	.553	.732		
Country (QAT)	19.845	17045.635	.999		
Country (SAU)	.470	.595	.430		
Country (TUN)	-.202	.588	.731		
Region	.062	.241	.796	.870	1.150
Constant	.586	.230	**.011***		
Chi-square	32.487		**.009****		
Cox and Snell R square	.080				
Negelkerke R square	.115				
Correctly predicted: IFRC	100%				
Correctly predicted: N-IFRC	5.5%				
Overall correctly classified	73.4%				
Number of observations[85]	391				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

85. Number of observations refers to the number of cases that were included in the analysis; the difference (570) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values or excluded because of the dependent variable (WEB_2) that excludes companies with a web site and IFR.

Like the results obtained from Model A_5, none of the explanatory variables (even the size and auditor) included in Model B_5 is significant; and this confirms that the main reason that larger companies and those are audited by one of the Big-4 auditing firms is to disseminate financial information via their web site. These factors will be linked to institutional theory and interpreted in the next section.

7.7 Discussion and Summary

This chapter examines the factors that may influence IFR adoption by listed companies in selected Arab MENA countries. Ten countries were chosen from both the GCC and North African regions to examine the effect of region in addition to factors of company size, profitability, leverage, auditor type, industrial sector, and country. Regression analysis was used to find out whether or not the predictors (independent variables) are associated with the outcomes (dependent variable). The findings of multivariate analysis are summarised as shown in Table 7.18.

Table 7.18: Summary of Binary Regression Findings for all Models

VAR	MODELS									
	IFR_1		IFR_2		IFR_3		WEB_1		WEB_2	
	A_1	B_1	A_2	B_2	A_3	B_3	A_4	B_4	A_5	B_5
SIZE	**.000****	**.000****	**.000****	**.000****	**.000****	**.000****	**.005****	**.001****	.722	.589
PROF	**.014***	**.025***	**.011***	**.011***	.194	.719	.237	.895	.566	.971
LEV	.847	**.021***	.931	**.027***	.549	.192	.652	.433	.744	.768
AUD	**.002****	**.002****	.052	**.016***	**.002****	**.006****	**.007****	**.014***	.115	.131
IND	**.013***	**.000****	.052	**.005****	.054	**.008****	.286	.108	.886	.850
COU	**.001****	**.000****	**.009****	**.001****	.190	.301	.596	.772	.941	.961
REG	**.000****	**.000****	**.002****	**.004****	**.032***	**.047***	.176	.270	.090	.796

Note: this table summarises the findings of binary regression models. **= $p \leq 0.01$ and *= $p \leq 0.05$; VAR= variable; IFR_1= the first dependent variable; IFR_2= the second dependent variable; IFR_3= the third dependent variable; WEB_1= the fourth dependent variable; WEB_2= the fifth dependent variable. SIZE= size; PROF= profitability; LEV= leverage; AUD= auditor; IND= industrial sector; COU= country; REG= region. Models A_1, A_2, A_3, A_4, and A_5 use total assets for size and return on assets for profitability; and models B_1, B_2, B_3, B_4, and B_5 use market capitalisation for size and return on equity for profitability.

Table 7.18 shows a summary of the findings from the binary regression analysis. The table shows that company size (measured by total assets or market capitalisation) is significantly and positively associated at 1% level with IFR_1, IFR_2, IFR_3, and WEB_1 but not for companies

with a web site with no IFR to companies without a web site (WEB_2). This indicates that a main use by larger companies that have a web site is to disseminate financial information. The findings of the binary regression regarding company size are consistent with previous studies in both developed and developing countries (see for example: Ashbaugh et al., 1999; Craven and Marston, 1999; Debreceny et al., 2002; Ismail, 2002; Oyelere et al., 2003; Xiao et al., 2004; Hadi, 2005; Bonsón and Escobar, 2006; Momany and Shorman, 2006; Al-Shammari, 2007; Al-Motrafi, 2008; Alanezi, 2009; Elsayed, 2010). As a result, the findings reveal that larger companies in Arab MENA countries adopt IFR, indicating a community of practice by these companies and possible isomorphic tendencies.

The prior empirical evidence suggests that, at the organisational field, coercive isomorphism may stem from a variety of sources such as regulatory agencies, customers, suppliers, and other key constituents (Jan et al., 2012). Guerreiro et al. (2012) mention that large companies may change their institutional practices because of informal pressure and observe what their large peer group is doing. Larger companies may adopt IFR more than smaller companies because they are more likely to be subject to national policy requirements and government pressure; for example, Alanezi (2009) reveals that large companies in Kuwait may use the internet as a tool to disclose activities such as general social initiatives, supporting sporting activities, and assisting students just to reduce governmental intervention in their operations. One more reason that large companies are more likely to have greater voluntary disclosure on the internet than smaller companies is coercive pressure by financial analysts for financial information from larger companies for analytical purposes.

It has been suggested that different isomorphisms can work at the same time and may lead to difficulty in separating and identifying the effect of a particular isomorphism (Townley, 1997; Mizuchi and Fein 1999). Moreover, one type of isomorphism may be induced from another type of isomorphism; for example, coercive pressure may lead organisational

practices to be diffused via mimetic or normative pressures (DiMaggio and Powell, 1991; Townley, 1997; Mizuchi and Fein 1999; Tuttle and Dillard, 2007).

As a result, coercive, mimetic or/ and normative pressure may result in large companies within Arab MENA listed companies to adopt IFR. From a mimetic isomorphism perspective, larger companies imitate each other because they are similar in terms of structure, strategy, and resources (Haveman, 1993). Amran and Haniffa (2011) reveal that the activities of large companies are of interest to various stakeholders, and as such they tend to provide leadership in IFR adoption and others tend to mimic their competitors' practices (Amran and Haniffa, 2011).

From a normative isomorphism perspective, large companies may form a community of practice because of the filtering of personnel that encourages normative isomorphism; DiMaggio and Powell (1983) mention that within many organisational fields, filtering occurs through the hiring of individuals from other companies hence sharing practice and through their networks and boundary spanning.

Overall, the finding of this study is that larger companies have more IFR than smaller companies, consistent with an institutional theory perspective, and confirms H_1.

In contrast, profitability was only found to be positive and significant in four models (Model A_1, B_1, A_2, and B_2). Consistent with some of the previous studies (see for example: Hadi, 2005; Pervan, 2006; Al-Moghaiwli, 2009; Aly et al., 2010). The other models (A_3, B_3, A_4, B_4, A_5, and B_5) showed that profitability was insignificant. Consistent with other previous studies (see for example: Ashbaugh et al., 1999; Larrán and Giner, 2002; Marston, 2003; Mendes-da-Silva and Christensen, 2004; Momany and Shorman, 2006; Barako et al., 2008; Oyelere and Kuruppr, 2010). The difference between Models A_1, B_1, A_2, and B_2 and A_3, B_3,

A_4, B_4, A_5, and B_5 is that the first group focuses on the dissemination of the financial information on a company web site unlike the second group that focuses on the existence of a company web site per se[86]. This indicates that profitable companies are likely to maintain a web site and to disclose financial information on it; and thus indicating a community of practice by these companies.

From an institutional perspective, profitable companies may make a conscious effort to mimic other successful companies (DiMaggio and Powell, 1983; Haveman, 1993; Tuttle and Dillard, 2007) and they may serve as models for other companies (Burns and Wholey, 1993, Amran and Haniffa, 2011).

Overall, the finding reveals that profitable companies in Arab MENA countries are more likely to adopt IFR than unprofitable companies and supports H_2.

Regarding leverage, Table 7.18 shows that leverage is significant in only two models (B_1 and B_2) although the findings from the univariate analysis revealed differences between companies with IFR and companies without IFR for leverage. From an institutional theory perspective leveraged companies are more likely to use the internet as a tool for financial disclosure because of the pressure and demand by lenders who want up to date information to assess the probability of these companies for meeting their debt obligations.

Overall, the findings of this study reveal that leverage is not a good predictor for IFR adoption. This finding is consistent with some of the previous studies (see for example: Brennan and Hourigan, 2000; Debreceny et al, 2002; Larrán and Giner, 2002; Oyelere et al.,

[86] In Models A_1, B_1, A_2, and B_2, companies with IFR were compared to companies without IFR; however, in Models A_4, B_4, A_5, and B_5, companies with a web site were compared to companies without a web. Models A_3 and B_3 differ slightly from the above mentioned models where companies with IFR were compared to companies without a web site.

2003; Xiao et al., 2004; Mendes-da-Silva and Christensen, 2004; Bollen et al., 2006; Celik et al., 2006; Chan and Wickramasinghe, 2006; Andrikopoulos and Diakidis, 2007; Al-Shammari, 2007; Barako et al., 2008; Alanezi, 2009; Almilia, 2009; Aly et al., 2010). Thus H_3 is only partially supported.

The findings of the current study also reveal that auditor type is significantly associated with IFR adoption in seven models (A_1, B_1, B_2, A_3, B_3, A_4, and B_4); consistent with previous studies (see for example: Xiao et al., 2004; Bonsón and Escobar, 2006; Al-Shammari, 2007; Alanezi, 2009, Elsayed, 2010). Models A_2, A_5, and B_5 which did not have a significant relationship between IFR and auditor type still had the sign in the right direction and is consistent with prior studies (see for example: Chan and Wickramasinghe, 2006; Al-Motrafi, 2008; Fekete et al., 2009; Aly et al., 2010).

Overall, the findings reveal that Arab MENA listed companies that are audited by one of the Big-4 auditing firms are more likely to adopt IFR, indicating a community practice by these companies. This is possibly because of a normative exo isomorphism brought by the Big-4 auditing firms who serve as role models and provide assistance (Xiao et al., 2004) and bring their own professional normative practices to Arab MENA companies. In general, these findings are consistent with an institutional theory perspective and support H_4.

Table 7.18 also reveals that sector type is positively and significantly associated with the adoption of IFR in four models[87]; but that financial sector is significantly different from the other sectors in almost all models. These findings support the results obtained from the univariate analysis that shows a difference between Financial Sector and the other sectors

[87] It is worth to be mentioned that there a weak relationship between this variable and IFR_2 ($p= 0.052$) and IFR_3 ($p= 0.054$); however, the current study does not take in account the associated relationship at level 10%.

indicating that this sector is the best among the others, and support the findings in Chapter 6. These findings are consistent with previous studies (Bernnan and Hourigan, 2000; Ettredge et al.,2001; Bonsón and Escobar, 2002; Debreceny et al., 2002; Ismail, 2002; Oyelere et al., 2003; Joshi and Al-Modhaki, 2003; Xiao et al., 2004; Bonsón and Escobar, 2006; Celik et al., 2006; Al-Shammari, 2007; Alanezi, 2009; Elsayed, 2010; Aly et al., 2010) reflecting a community of practice in the banking and financial sector for Arab MENA listed companies.

From institutional theory perspective, Scott and Meyer (1991) state that "the structure of the sector within which an organisation is located is taken to be an important aspect of the environment of the organisation" (p. 108). This may be interpreted as coercive isomorphism as financial companies (banks, insurance, and investment companies) have specific regulatory requirements in most countries to meet arduous governance requirements; further, there may be mimetic isomorphism where banks imitate each other because they want to be alike (DiMaggio and Powell, 1983). As a normative isomorphism perspective, there may be a network whereby the managers and bankers meet together in various networks and discuss issues (such IFR) within their industry. Hence there is support for H_5.

The findings shown at Table 7.18 reveal that there is a country effect on IFR adoption in most models. These findings emphasise the results obtained from Chapter 6 which reveal that country is a factor affecting IFR adoption and is consistent with other previous studies (Bonsón and Escobar, 2002; Ismail, 2002; Bollen et al., 2006).

Allam and Lymer (2003) mention that both the growth of multinational companies and the internet as a means of communication brings different countries and their reporting cultures closer over time; however, the findings of this study show that there is a country effect on IFR adoption in Arab MENA. Thus, globalisation may be more evident in developed rather

than developing economics. According to Turrent and Ariza (2012) both the legal and economic environment of a country is a key factor in corporate disclosure; thus, these economic and legal aspects of each nation may affect IFR adoption. Despite the fact that all the selected countries included in the analysis are both Arab and Muslim, each country has its own culture and legal system; and the business community is networked at the national level. Furthermore, most of these countries were occupied by different western countries at different times such as Britain, Italy, and France and the influence of these different countries may still exist in the countries of this study. As a result, companies within one country may adopt similar practices through normative, mimetic and coercive influences; and thus supporting H_6.

Finally, Table 7.18 shows that region is significantly associated with IFR adoption. These results cannot be compared with prior studies because there have not been any previous studies that test this relationship. Geographically, the two regions of GCC and North Africa are close to each other, separated only by the Red Sea, but economically they are very different. Therefore, as a mimetic isomorphism, countries within the GCC are alike and adopt IFR; but in North Africa are more like individual sovereign states and IFR is far more sporadic. This shows a significant regional difference that may be argued to be linked to economic and political differences across the regions. However, the earlier regression models show that larger companies have higher levels of IFR than smaller companies and many of the largest, most profitable companies operate in the GCC countries. This regional effect may in fact be the result of size. To establish the relationship, further regression models need to be developed to test this. This is out with the scope of the current thesis and is an area to be developed for future research. The finding that region is significant shows that IFR has been institutionalised across borders and that companies in one region may copy the practices of

those in closely aligned neighbouring countries; and hence supports H_7. This is a significant contribution to knowledge of this thesis.

In general, the results of the statistical analysis discussed above were mixed. The results reveal that Arab MENA listed companies that engage in IFR are more likely to be larger, more profitable, audited by one of the Big-4 auditing firms, are banks or financial companies, and are from the GCC as opposed to North Africa. The next chapter includes a general discussion and conclusion to this thesis.

Chapter 8: Conclusion, Limitations, and Future Research

Chapter 8

Conclusion, Limitation, and Future Research

8.1 Introduction

This thesis has evaluated the IFR of Arab MENA listed companies and examined the determinants of IFR adoption. This chapter summarises this study and outlines the empirical findings as well as setting them in the context of the study's objectives. Particularly, the chapter provides an overview of the two sets of empirical results and draws some conclusions about IFR practices in the Arab MENA region. It also highlights the main contributions to our knowledge as well as identifying the research limitations and providing recommendations for avenues of future research. The reminder of this chapter is organised as follows: Section 8.2 presents a general summary of the study. Section 8.3 discusses the major findings of the current thesis. Section 8.4 then outlines the main contributions to knowledge of the study, before Section 8.5 highlights the main limitations and the problems of conducting the study. Section 8.6 suggests some avenues for future research regarding IFR. Section 8.7 is the final concluding summary.

8.2 Summary of the Study

This thesis investigates the IFR practices of listed companies in Arab MENA countries. It comprises two empirical works: the first empirical work evaluates IFR in 16 Arab MENA countries that have a stock exchange, and answers the first research question; the second empirical work examines the factors that influence listed companies to adopt IFR practices, including ten selected Arab MENA countries from two regions (the Middle East and North Africa), and answers the second research question.

This study consists of eight chapters. *Chapter 1* introduces and outlines the research's objectives, questions, and structure. *Chapter 2* provides an overview about the 16 Arab

MENA countries' contexts including geographical, political, and economical background; financial reporting environment; the stock exchange and the internet in these countries. *Chapter 3* reviews the literature regarding IFR in both developed and developing countries with respect to issues investigated in the current thesis. *Chapter 4* presents the theoretical framework in general and institutional theory that is adopted in the study in particular. This chapter identifies institutional theory and the different types of institutional pressures (coercive, mimetic, and normative) that may shape the current situation of IFR in Arab MENA countries. *Chapter 5* discusses the research methodology and methods; the chapter reviews Burrell and Morgan's (1979) assumptions and justifies the functionalist paradigm that is adopted in the thesis. *Chapter 6* reports the findings of the research first empirical work; it provides a full picture about IFR in every single country of the 16 Arab MENA countries using a sample of 1456 companies listed on the stock exchanges of these countries in middle of 2010. In addition, the chapter includes statistical analysis for determining whether there are differences between Arab MENA countries regarding IFR adoption. *Chapter 7* examines factors that affect listed companies among selected ten Arab MENA countries using a sample of 961 companies listed on the stock exchange of these countries in December 2010; this chapter reports the results obtained from different binary regression models and links then to prior literature and the theoretical framework adopted in the thesis. *Chapter 8* then outlines the extent of overall IFR in the Arab MENA region and determines its adoption in the Arab MENA region.

8.3 The Research Findings

This section summarises the results from the two empirical analyses conducted in the thesis. The findings from Chapter 6 answer the first research question whereas the findings from Chapter 7 answer the second research question.

The first objective of this study is to evaluate the extent of IFR by Arab MENA listed companies. Chapter 6 reports the results of the examination of the extent of IFR practices amongst all 1456 companies listed on the stock exchanges of 16 Arab MENA countries as at the middle of 2010. This chapter investigates whether or not these companies have a web site; and if so, whether or not they disseminate financial information via their web site. The findings suggest that there is a variation across Arab MENA countries, not only in companies having a web site but also in having IFR. In general, the findings reveal that 1096 (75%) of Arab MENA listed companies have a web site and 742 of which (68%) post financial information via their web site. However, the results differ from one country to another; it ranges from 34% of companies having a web site in Iraq to 100% in Libya; and from 38% of companies with IFR, also in Iraq, to 97% in Bahrain. For further evaluation, the 16 countries were divided into three groups: i) North African countries; ii) Middle East (GCC) countries; and iii) Middle East (Non-GCC) countries. The findings reveal that there are differences between the three groups of where companies are listed with the Middle East (GCC) countries being the best among the three groups with 91% of companies having a web site and 76% of which have IFR. Companies listed in North African countries are second with 76% of companies having a web site and 60% of them having IFR. Lastly, companies listed in Middle East (Non-GCC) countries are last with only 51% of companies having a web site and only 54% of these have IFR.

Furthermore, the findings indicate differences between sectors. For comparison purposes, the 1456 listed companies were distributed and classified into three groups: i) banks; ii) other financial companies; and iii) Non- financial companies. The findings from Chapter 6 provide strong evidence that banks are the best amongst the listed companies with 97% of banks having a web site and 93% of which have IFR. The other financial companies come in second with 80% of companies having a web site and 77% of which with IFR. Lastly, for Non-financial companies only 70% of companies have a web site and 58% of which have IFR.

So in answer to the first research question overall, it seems that IFR by listed companies in Arab MENA countries is becoming more established; particularly, in GCC countries with a high percentage of listed companies having a web site and posting financial information via their web sites.

Chapter 7 investigated the factors that may affect Arab MENA listed companies to adopt IFR. Seven variables with different models were examined by using binary logistic regressions. The findings of this chapter were compared to prior studies and interpreted under institutional theory framework. The main findings reveal that there are several community of practices in Arab MENA listed companies with larger size companies audited by the Big-4 in GCC having more IFR. There may be various actor networks working whereby managers meet at industry meetings, conferences and social events and share their practices so that these practices become institutionalised.

The findings reveal that company size is positively and significantly associated with IFR adoption. This indicates that larger companies in Arab MENA countries are likely to have a web site and disseminate financial reporting via their web site. From an institutional theory perspective, larger companies have a great number of stakeholders who demand information (financial and none financial information) in easy and quick way which can be provided by the internet. Further, this also may interpret by mimetic isomorphism where large companies imitate each other to be alike; and this is because they are similar in terms of structure, strategy, and resources.

The findings also reveal that profitability is positively and significantly associated with IFR adoption. However, this variable is less powerful than company size; it was significant only in four models; companies in these models concern mainly with IFR adoption rather than

having a web site only. This indicates that the reason behind forming community of practices by profitable companies in Arab MENA listed companies is to disclose financial information via their web site. This relationship also can be interpreted in two ways from institutional theory perspective. The stakeholders and potential investor inquiry puts these companies under more pressure than non-profitable companies (coercive isomorphism); on the other hand, these companies serve as models for other companies and hence, similar profitable companies may imitate other successful companies to be alike.

With regard to auditor type, the findings reveal that there is community of practice by Arab MENA listed companies audited by one of the Big-4 auditing firms. Positive and significant relationship was found between this variable and IFR adoption in seven models. From an institutional theory perspective, a possible reason that explains why these companies adopt IFR is that the Big-4 firms affect the globalisation of accounting and represent normative isomorphism by the choices they make in accordance with their implemented practices as large audit firms that have expertise. Hence, they want to maintain their own reputations and influence their client to have IFR.

Another community of practice was found by Arab MENA listed companies within one sector. The findings reveal that industrial sector is significant at least in four models; and that the financial sector is the best among the other sectors. Companies operating in this sector are likely to adopt IFR more than the other sectors. Mimetic isomorphism may interpret this relationship where companies within one sector imitate each other because of uncertainty or to be alike. Further, from a normative isomorphic perspective, companies within the same industry may network whereby companies' managers meet together and discuss issues such as IFR.

Country factor has been examined in few prior studies because it requires more than one country to be investigated. The findings regarding this factor reveal that there is community of practice by Arab MENA listed companies within one country. This result was obtained by examining ten selected Arab MENA countries and supports the results obtained from Chapter 6 that includes 16 Arab MENA countries. The economic, legal, and cultural environment is different among Arab MENA countries; and hence, companies within one country may imitate each other and be alike.

Finally, this study has the opportunity to examine the effect of region on IFR adoption where countries included in the statistical analysis were from two different regions namely Middle East (GGC) and North Africa. The evidence from Chapter 7 indicates a positive and significant relationship between region and IFR. Chapter 6 reports that the extent of IFR by companies listed in the GCC region is higher than the North African region. Moreover, Chapter 2 mentions that the economies of the GCC countries are better than the other countries. Therefore, mimetic isomorphism may explain this relationship where companies within one region imitate each other.

8.4 Contribution to Knowledge

The findings of the current study provide a number of contributions to our knowledge regarding the practices of internet financial reporting. First, most prior studies have been conducted in developed countries and only a few in developing countries; specifically, very few studies have been conducted in Arab countries. This study will contribute to narrowing the gap in the literature on corporate uses of the internet as a financial disclosure tool. Further, there are few prior studies that are multi-country in nature; and the majority of these studies have been conducted in the US and European countries. There are a limited number of studies- to my knowledge- that include developing countries such as China, South Africa,

New Zealand, and India. To the best of the researcher's knowledge, there are only three studies that investigate IFR practices in Arab MENA countries. However, none of these studies include more than three countries; Joshi and Al-Modhaki (2003) compared IFR practices in two Arab MENA countries namely Kuwait and Bahrain; Mohamed (2010) investigated the practices of two Arab MENA countries namely Oman and Bahrain; Ismail (2002) extended his study's sample to include three Arab MENA countries namely Bahrain, Qatar, and Saudi Arabia. It is noticeable that the number of countries in these studies does not exceed three countries. Moreover, all these studies were conducted in the GCC region as a part of Middle East region and there is no study that compares IFR practices between the Middle East and North African regions. This study is the first to do so by including all Arab MENA countries that have a stock exchange; the total number of listed companies in these countries is 1456.

Furthermore, reviewing the literature reveals that there are no prior research studies of IFR practices in Algeria, Iraq, Lebanon, Libya, Morocco, Palestine, Syria, and Tunisia. This is the first study that investigates IFR practices in all of these countries of the Arab MENA region.

Another major contribution relates to the theoretical framework underpinning the study. Many different theories (for example; Agency Theory, Signalling Theory, and Stewardship Theory) have been adopted in prior studies to interpret the factors that influence IFR adoption. As mentioned earlier, the majority of prior studies were conducted in the developed countries and these theories may not be suitable in the context of emerging markets (Leventis, 2001). To the best of the researcher's knowledge, there is no study, either in developed or in developing countries, which have utilised an institutional perspective in explaining the factors affecting IFR adoption. This study is the first to employ an institutional framework to interpret the findings of the empirical work.

8.5 Limitations

As with any other academic study, this study is subject to a number of limitations. The first aim of this study is to determine the extent of IFR by listed companies in Arab MENA countries. This was done by using a strategy where all Arab MENA listed companies were investigated regarding: i) whether or not they had a web site; and ii) if so, whether or not they disseminated financial information via a web site. However, the second phenomenon was limited to check the existence of financial information on the web site of Arab MENA listed companies including: i) a comprehensive set of financial statements (containing footnotes and the auditors' report); ii) summary of financial statements; iii) financial highlights; iv) a link to a company's annual report either on a stock exchange in which the company is listed or elsewhere on the internet. This might be a limitation to this study, as it does not use a disclosure index to determine the level of IFR by Arab MENA listed companies.

The factors that are chosen to be investigated may represent another limitation to this thesis. The second empirical work of the study aims to determine the factors that influence Arab MENA listed companies to adopt IFR. However, these factors are not exclusive to determining IFR adoption as other factors can be examined such as ownership structure, and company age. Excluding these factors was due to the fact that the data was not available for a number of the countries; in other words, these factors are not possible to examine in this study.

8.6 Avenues for Future Research

The current study represents one of the most comprehensive IFR studies and many research opportunities could be driven from its findings. *First*, as mentioned earlier, this thesis focuses only on whether or not Arab MENA listed companies have IFR. Future research can employ a disclosure index to determine the level of IFR by Arab MENA listed companies.

Second, this thesis is applied to the Arab MENA region as a part of developing countries globally. A comparison between these countries and other countries can be performed to explain the use of IFR by Arab MENA listed companies compared to either developing or developed countries.

Third, the study focuses on IFR by investigating company web sites. Future research may include preparers' perspectives and hence, both quantitative and qualitative techniques can be employed for collecting and analysing the responses of the preparers' information about the adoption of IFR by Arab MENA listed companies.

Fourth, future research in the Arab MENA region may consider some other variables that are not included in this study such as ownership structure and liquidity. In addition, other proxies may be used as measures for the current variables such as total sales for size and earnings per share for profitability.

Fifth, using the same sample of Arab MENA listed companies at a different point of time (for example; apply similar analysis in 2016); the results can be compared to find out whether or not there is a positive change in IFR adoption by Arab MENA listed companies after the uprising of Arab Spring especially in North Africa countries namely: Egypt, Libya, and Tunisia.

8.7 Concluding comments

This research has shown the extent of IFR in Arab MENA countries and determined the factors that affect listed companies in Arab MENA region to adopt IFR. In conclusion, the findings reveal that there is a variation in IFR among the 16 Arab MENA countries where the GCC countries are the best, with the majority of the listed companies in this region having

IFR; North African countries come second; whereas the other Middle East countries are the lowest in having IFR. Country characteristics of these countries including political and economic factors may explain these differences in IFR practices. The economic differences between these countries interpret this variation where the GCC countries have better economies than the other Arab MENA countries reflecting a community of practice by these countries. Thus, listed companies within the GCC region imitate each other just to be alike on the same line. The political situation may also explain these differences where countries have poor IFR (such as Iraq) are unstable countries politically.

Further, the findings indicate that industry type affects Arab MENA listed companies to adopt IFR with the majority of banks in Arab MENA region having IFR forming a community of practice by these banks.

These communities of practice (region, country or industry) may have formed because of mimetic pressure put on listed companies in these communities.

The findings also reveal that larger companies in Arab MENA region have more IFR than smaller companies reflecting a community of practice by these companies; normative and mimetic isomorphic tendencies may pressurise larger companies to adopt IFR. For example, managers of these companies may network where they meet together and talk about business issues (such as IFR), and thus, they share similar ideas by imitating each other.

Another factor that was associated with the adoption of IFR is the auditor type where Arab MENA listed companies that were audited by one of the Big-4 auditing firms have more IFR than the others. This can be explained by normative pressure where the Big-4 firms extend their influence by representing IFR as an essential tool for a company.

Overall, it seems that IFR in Arab MENA region is growing; particularly in GCC countries but less so in North African countries and Middle East countries ex GCC. There is thus more research required in this area to examine how IFR develops in the future

References

Abdelsalam, O. H. 1999. 'The Introduction and Application of International Accounting Standards to Accounting Disclosure Regulations of a Capital Market in a Developing Country: The Case of Egypt.' Unpublished PhD Thesis, Heriot-Watt University, Edinburgh, UK.

Abdelsalam, O. H., Bryant, S. M. & Street, D. L. 2007. 'An Examination of the Comprehensiveness of Corporate Internet Reporting Provided by London-Listed Companies.' *Journal of International Accounting Research,* 6:2, 1-33.

Abdulhamid, F. Z. 2005. 'Malaysian Companies' Use of the Internet for Investor Relations.' *Corporate Governance,* 5:1, 5-14.

Abdullatif, M. & Al-Khadash, H. A. 2010. 'Putting Audit Approaches in Context: The Case of Business Risk Audits in Jordan.' *International Journal of Auditing,* 14:1, 1-24.

Abrahamson, E. 1991. 'Managerial Fads and Fashions: The Diffusion and Rejection of Innovations.' *Academy of Management Review,* 16:3, 586-612.

Abu-Bader, S. & Abu-Qarn, A. S. 2008. 'Financial Development and Economic Growth: The Egyptian Experience.' *Journal of Policy Modelling,* 30:5, 887-98.

AbuGhazaleh, N. M., Qasim, A. & Roberts, C. 2012. 'The Determinants of Web-Based Investor Relations Activities By Companies Operating In Emerging Economies: The Case Of Jordan.' *The Journal of Applied Business Research,* 28:2, 209-26.

Accounting Standards Board 2003. 'Statement of Principles for Financial Reporting: Proposed Interpretation for Public Benefit Entities.' London.

Accounting Standards Board (ASB) 1999. 'Statement of Principles for Financial Reporting.' London.

Accounting Standards Steering Committee 1975. 'The Corporate Report.' London.

Adams, C. A., & Frost, G. R. 2004. *The Development of Corporate Web-sites and Implications for Ethical, Social and Environmental Reporting Through These Media.* Institute of Chartered Accountants of Scotland.

Aerts, W., Cormier, D. & Magnan, M. 2006. 'Intra-industry imitation in corporate environmental reporting: An international perspective.' *Journal of Accounting and Public Policy,* 25:3, 299-331.

Agboola, A. A. & Salawu, M. K. 2012. 'The Determinants of Internet Financial Reporting: Empirical Evidence from Nigeria.' *Research Journal of Finance and Accounting,* 3:11, 95-105.

Agyei-Mensah, B. K. 2012. 'Corporate financial reporting: Firm characteristics and the use of internet as a medium of communication by listed firms in Ghana.' *African Journal of Business Management,* 6:6, 2299-309.

Ahmad, N. S. & Gao, S. S. 2004. 'Changes, problems and challenges of accounting education in Libya.' *Accounting Education,* 13:3, 365-90.

Ahmed, A. H. A. 2013. 'Corporate Internet Reporting in Egypt: Practices and Perceptions.' Unpublished PhD thesis, School of Business, University of Dundee, Dundee, UK.

Al Nagi, E. & Hamdan, M. 2009. 'Computerisation and e-Government implementation in Jordan: Challenges, obstacles and successes.' *Government Information Quarterly,* 26:4, 577-83.

Al-Akra, M., Eddie, I. A. & Ali, M. J. 2010a. 'The Association between Privatisation and Voluntary Disclosure: Evidence from Jordan.' *Accounting and Business Research,* 40:1, 55-74.

Al-Akra, M., Eddie, I. A. & Ali, M. J. 2010b. 'The influence of the introduction of accounting disclosure regulation on mandatory disclosure compliance: Evidence from Jordan.' *The British Accounting Review,* 42:3, 170-86.

Al-Akra, M., Jahangir Ali, M. & Marashdeh, O. 2009. 'Development of accounting regulation in Jordan.' *The International Journal of Accounting,* 44:2, 163-86.

Alali, F. & Romero, S. 2012. 'The use of the Internet for corporate reporting in the Mercosur (Southern common market): The Argentina case.' *Advances in Accounting, incorporating Advances in International Accounting,* 28:1, 157-67.

Alanezi, F. S. 2009. 'Factors Influencing Kuwaiti Companies' Internet Financial Reporting.' *Journal of Economic & Administrative Sciences,* 25:2, 44-78.

Alarussi, A. L. I. S., Se;lamat, M. H. & Hanefah, M. M. 2011. 'The Determinants of Internet Financial Disclosure: The Perspective of Malaysian Listed Companies.' *International Journal of Management Studies,* 18:1, 1-29.

Alarussi, A. S., Hanefah, M. M. & Selamat, M. H. 2009. 'Internet Financial and Environmental Disclosures by Malaysian Companies.' *Issues in Social and Environmental Accounting,* 3:1, 3-25.

Al-Bannay, A. M. 2002. 'Perceptions among Accountants, Auditors and Users of IAS in preparing annual Accounts: The Case of Kuwait.' Unpublished PhD thesis, City University, London, UK.

Algeria Stock Market 2012 Available at: http://www.sgbv.dz/ [Accessed 6 November 2012].

Al-Hayale, T. 2010. 'Financial reporting on the internet in the Middle East: the case of Jordanian industrial companies.' *International Journal of Accounting and Finance,* 2:2, 171-91.

Al-Jabri, H. S. 2008. 'Financial Reporting Practices in Oman and Compliance with Disclosure Requirements of International Financial Reporting Standards.' Unpublished PhD thesis, Cardiff University, Cardiff, UK.

Al-Khater, K. & Naser, K. 2003. 'Users' Perceptions of Corporate Social Responsibility and Accounting: Evidence from an Emerging Economy.' *Managerial Auditing Journal,* 18:6/7, 538-48.

Al-kheder, S., Haddad, N., Fakhoury, L. & Baqaen, S. 2009. 'A GIS Analysis of the Impact of Modern Practices and Polices on the Urban Heritage of Irbid, Jordan.' *Cities- The International Journal of Urban Policy and Planning,* 26:2, 81-92.

Allam, A., & Lymer, A. 2003. 'Developments in Internet Financial Reporting: Review and Analysis across Five Developed Countries.' *The International Journal of Digital Accounting Research,* 3:6, 165-99.

Almilia, L. S. 2009. 'Determining Factors of Internet Financial Reporting in Indonesia.' *Accounting & Taxation,* 1:1, 87-99.

Al-Moghaiwli, M. H. 2009. 'A Survey of Internet Financial Reporting in Qatar.' *Journal of Economic & Administrative Sciences,* 25:1, 1-20.

Al-Motrafi, K. A. 2008. 'Internet Financial Reporting in Saudi Arabia; Users' Perceptions and Disclosure.' Unpublished PhD thesis, Aston University, Aston, UK.

Almujamed, H. I. 2011. 'Technical Analysis in the Kuwait Stock Exchange.' Unpublished PhD thesis, University of Dundee, Dundee, UK.

Al-Mulhem, A. A. 1997. 'An Empirical Investigation of the Level of Financial Disclosure by Saudi Arabian Corporations.' Unpublished PhD thesis, University of Hull.

Al-Omar, H. A. 1990. 'Oil, the financial sector, and the economy: A Case Study of Kuwait.' Unpublished PhD thesis, University of Miami, Miami, Florida, USA.

Al-Omari, A. M. 2010. 'The Institutional Framework of Financial Reporting in Jordan.' *European Journal of Economics, Finance and Administrative Sciences,* 22, 32-50.

Al-Sabah, Y. S. F. 1980. *The Oil Economy of Kuwait.* London; Boston: Kegan Paul International.

Alsaeed, K. 2005. 'The Association between Firm-Specific Characteristics and Disclosure: The Case of Saudi Arabia.' *The Journal of American Academy of Business, Cambridge,* 7:1, 310-21.

Al-Shammari, K. 2011. 'Kuwait Internet Connectivity Spurs Debate.' Al-Shorfa.com, available at http://alshorfa.com/en_GB/articles/meii/features/main/2011/07/09/feature01?change_locale=true.

Al-Shammari, B. 2007. 'Determinants of Internet Financial Reporting by Listed Companies on the Kuwait Stock Exchange.' *Journal of International Business and Economics,* 7:1, 162-78 Available at http://www.freepatentsonline/article/Journal-International-Business-Economics/178900117.html [Accessed on 20th of July 2011].

Al-Shammari, B. 2008. 'Voluntary disclosure in Kuwait corporate annual reports.' *Review of Business Research,* 1, 10-30.

Althani, A. F. 2010. 'Corporate Governance Challenges Accompanying the Privatisation of Public Education in Qatar.' Unpublished PhD thesis, City University London.

Aly, D., Simon, J. & Hussainey, K. 2010. 'Determinants of Corporate Internet Reporting: evidence from Egypt.' *Managerial Auditing Journal*, 25:2, 182-202.

Al-Yaqout, A. 2006. 'The Usefulness of Quarterly Financial Reporting '. Unpublished PhD thesis, Loughborough University, Loughborough, UK.

American Institute of Certified Public Accountants (AICPA) 1973. 'Trueblood Report: Report of the Study Group on the Objectives of Financial Statements.' New York.

Amman Stock Exchange 2012. 'Available at: http://www.ase.com.jo/ [Accessed 13 November 2012].'

Amran, A. & Haniffa, R. 2011. 'Evidence in Development of Sustainability Reporting: a Case of a Developing Country.' *Business Strategy and the Environment*, 20:3, 141-56.

Anandarajan, A. & Hasan, I. 2010. 'Value relevance of earnings: Evidence from Middle Eastern and North African Countries.' *Advances in Accounting*, 26:2, 270-79.

Andrikopoulos, A. & Diakidis, N. 2007. 'Financial Reporting Practices on the Internet: The Case of Companies Listed in the Cyprus Stock Exchange.' *SSRN eLibrary, Available at: http://ssrn.com/paper=999183*.

Arab IP Centre 2012a. 'Censorship in the Arab world - Iraq.' Available at: http://www.arabipcentre.com/the-internet-in-iraq.php [Accessed 9 November 2012].

Arab IP Centre 2012b. 'Censorship in the Arab world - Libya.' Available at: http://www.arabipcentre.com/the-internet-in-libya.php [Accessed 14 November 2012].

Arab IP Centre 2012c. 'Censorship in the Arab world - Jordan.' Available at: http://www.arabipcentre.com/the-internet-in-jordan.php [Accessed 14 November 2012].

Arab IP Centre 2012d. 'Censorship in the Arab world - Saudi Arabia.' Available at: http://www.arabipcentre.com/the-internet-in-saudi-arabia.php [Accessed 14 November 2012].

Arab IP Centre 2012e. 'Censorship in the Arab world - Tunisia.' Available at: http://www.arabipcentre.com/the-internet-in-tunisia.php [Accessed 14 November 2012].

Ardalan, K. 2003. 'Theories and Controversies in Finance: A Paradigmatic Overview.' *International Journal of Social Economics*, 30:1/2, 199-209.

Ardalan, K. 2003a. 'Money and Academic Finance: The Role of Paradigms.' *International Journal of Social Economics*, 30:6, 720-40.

Ardalan, K. 2003b. 'On Clinical Research in Finance.' *International Journal of Social Economics*, 30:10, 1038-48.

Ashbaugh, H., Johnstone, K. M., & Warfield, T. D. 1999. 'Corporate Reporting on the Internet.' *Accounting Horizons*, 13:3, 241-57.

Awad, I. & Daraghma, Z. 2009. 'Testing the Weak-Form Efficiency of the Palestinian Securities Market.' *International Research Journal of Finance and Economics*: 32, 7-17.

Ayish, M. I. 2005. 'Virtual public relations in the United Arab Emirates: A case study of 20 UAE organizations' use of the Internet.' *Public Relations Review,* 31:3, 381-88.

Bait-El-Mal, M. M. 1973. 'The development of accounting in Libya.' *International Journal of Accounting: Education and Research,* 8: Spring, 83-102.

Bait-El-Mal, M. M., Smith, C. H. & Taylor, M. E. 1973. 'The Development of Accounting in Libya.' *international Journal of Accounting,* 8, 83-101.

Baker, R. & Rennie, M. D. 2006. 'Forces Leading to the Adoption of Accrual Accounting by the Canadian Federal Government: An Institutional Perspective.' *Canadian Accounting Perspectives,* 5:1, 83-112.

Barac, K. 2004. 'Financial Reporting on the Internet in South Africa.' *Meditari Accountancy Research,* 12:1, 1-20.

Barako, D. G., Hancock, P., & Izan, H. Y. 2006. 'Relationship between Corporate Governance Attributes and Voluntary Disclosure in Annual Reports: the Kenyan Experience.' *The Electronic Journal of the Accounting Standards Interest Group of AFAANZ,* 5:1, 1-25.

Barako, D. G., Rusmin & Tower, G. 2008. 'Web Communication: An Indonesian perspective.' *African Journal of Business Management,* 2:3, 53-58.

BBC 2010 'Qatar Profile '. Available at: http://www.bbc.co.uk/news/world-middle-east-14702609 [Accessed 1 November 2012].

Beard, V. & Al-Rai, Z. 1999. 'Collection and Transmission of Accounting Information across Cultural Borders: The Case of US MNEs in Jordan.' *The International Journal of Accounting,* 34:1, 133-50.

Beattie, V., & Pratt, K. 2001. 'Business Reporting: Harnessing the Power of the Internet for Users.' The Institute of Chartered Accountants of Scotland, Edinburgh, UK.

Beirut Stock Exchange 2012 Available at: http://www.bse.com.lb/ [Accessed 14 November 2012].

Belkaoui, A. 1987. *Inquiry and Accounting: Alternate Methods and Research Perspectives.* Quorum Books: New York.

Berk, J. 2001. 'Leveraging the Internet for Financial Reporting.' *Financial Executive,* May: 54-56.

Bjorck, F. 2004. 'Institutional theory: A new perspective for research into IS/IT security in organisations.' Proceedings of the 37th Hawaii International Conference on System Sciences.

Boer, K. d., Figee, C., Jaffar, S. & Streumer, D. 2008. 'Perspective on the Middle East, North Africa and South Asia (MENASA) region.' *McKinsey & Company, Inc. Dubai, United Arab Emirates.*

Bollen, L., Hassink, H. & Bozic, G. 2006. 'Measuring and Explaining the Quality of Internet Investor Relations Activities: A Multinational Empirical Analysis.' *International Journal of Accounting Information Systems,* 7:4, 273-98.

Bonsón, E. & Escobar, T. 2002. 'A Survey on Voluntary Disclosure on the Internet. Empirical Evidence from 300 European Union Companies.' *The International Journal of Digital Accounting Research,* 2:1, 27-51.

Bonsón, E. & Escobar, T. 2006. 'Digital Reporting in Eastern Europe: An Empirical Study.' *International Journal of Accounting Information Systems,* 7:4, 299-318.

Boubaker, S., Lakhal, F. & Nekhili, M. 2012. 'The Determinants of Web-Based Corporate Reporting in France.' *Managerial Auditing Journal,* 27:2, 126-55.

Bourne, V. 2012. 'Introduction to Research Statistics Using SPSS for CASE/CASS PhD Students.' Organisational and Professional Development, University of Dundee, Dundee, UK (Unpublished).

Bozcuk, A., Arzova, B. S. & Aslan, S. 2009. 'Internet Financial Reporting: The Case of Turkey.' *2nd EUROMED Conference of the EUROMED Academy of Business, SSRN eLibrary*.

Bozied, M. M. 1998. 'An Empirical Investigation of the Relationship between the Extent of Disclosure Incorporate Annual Reports and two Company Characteristics '. Unpublished PhD thesis, Pennsylvania State University, Pennsylvania, USA.

Breenan, N. & Kelly, S. 2000. 'Use of the Internet by Irish Companies for Investor Relations Purposes.' *Accountancy Ireland,* 32:4, 23-25.

Brennan, N., & Hourigan, D. 2000. 'Corporate Reporting on the Internet by Irish Companies.' *Irish Accounting Review,* 7:1, 37-68.

Bryman, A. & Bell, E. 2011. *Business Research Methods.* 3rd Edition, Oxford, University Press.

Brynen, R. 1992. 'Economic Crisis and Post-Rentier Democratisation in the Arab World: The Case of Jordan.' *Canadian Journal of Political Science / Revue canadienne de science politique,* 25:1, 69-97.

Budisusetyo, S. & Almilia, L. S. 2008. 'The Practice of Financial Disclosure on Corporate Website: Case Study in Indonesia.' *Proceeding International Conference on Business & Management. Universiti Brunei Darussalam, 8 – 9 January 2008*. Darussalam: SSRN eLibrary.

Burkhart, G. E. & Goodman, S. E. 1998. 'The Internet Gains Acceptance in the Persian Gulf.' *Communications of the ACM,* 41:3.

Burns, J. 2000. 'Institutional Theory in Management Accounting Research: The Past, the Present, and the Future.' Paper presented in ENROAC Conference, Oslo, 11th -14th 2000, Conference Proceedings.

Burns, J. 2010. 'Institutional Theory in Accounting Research.' Presentations in PhD Seminars. Dundee, University of Dundee: (Unpublished).

Burns, J. & Scapens, R. W. 2000. 'Conceptualizing Management Accounting Change: An Institutional Framework.' *Management Accounting Research,* 11:1, 3-25.

Burns, L. R. & Wholey, D. R. 1993. 'Adoption and Abandonment of Matrix Management Programs: Effects of Organizational Characteristics and Interorganisational Networks.' *Academy of Management Journal*, 36:1, 106-38.

Burrell, G. & Morgan, G. 1979. *Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life.* Hants: Ashgate Publishing Limited.

Buzied, M. M. 1998. 'Enterprise Accounting and its Context of Operation: Case of Libya.' Unpublished PhD thesis, University of Durham, UK.

Camfferman, K. & Cooke, T. E. 2002. 'An Analysis of Disclosure in the Annual Reports of U.K. and Dutch Companies.' *Journal of International Accounting Research*, 1:1, 3-30.

Campbell, D. & Slack, R. 2008. 'Analysts' Perspectives on the Materiality of Voluntary Narratives in Annual Reports.' ACCA, UK.

Capital Market Authority 2003. 'Code of Corporate Governance for MSM Listed Companies.' Capital Market Authority.

Capital Market Authority 2006. 'Corporate Governance Regulations in the Kingdom of Saudi Arabia.' Capital Market Authority.

Carpenter, V. L. & Feroz, E. H. 1992. 'GAAP as a Symbol of Legitimacy: New York State's Decision to Adopt Generally Accepted Accounting Principles.' *Accounting, Organizations and Society*, 17:7, 613-43.

Carruthers, B. G. 1995. 'Accounting, Ambiguity, and the New Institutionalism.' *Accounting, Organizations and Society*, 20:4, 313-28.

Casablanca Stock Exchange 2012 Available at: http://www.casablanca-bourse.com/bourseweb/en/content.aspx?IdLink=201&Cat=1 [Accessed 8 November 2012].

Celik, O., Ecer, A. & Karabacak, H. 2006. 'Impact of Firm Specific Characteristics on the Web Based Business Reporting: Evidence from the Companies Listed in Turkey.' *Problems and Perspectives in Management*, 4:3, 100-33.

Census-Oman. 2010 'General Census of Population.' Available at: http://www.moneoman.gov.om/documents/Census_2010.pdf [Accessed 1 November 2012].

Census-Qatar. 2010 'Our Census Our Future.' Available at: http://www.qsa.gov.qa/QatarCensus/GeneralInfo.aspx [Accessed 1 November 2012].

Central Informatics Organization. 2010. 'Bahrain: Census 2010' Available at: http://www.cio.gov.bh/cio_eng/index.html.

Central Intelligence Agency. 2012a. 'The World FactBook - Algeria.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/ag.html [Accessed 12 November 2012].

Central Intelligence Agency. 2012b. 'The World FactBook - Egypt.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html [Accessed 12 November 2012].

Central Intelligence Agency. 2012c. 'The World FactBook - Iraq.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html [Accessed 12 November 2012].

Central Intelligence Agency. 2012d. 'The World FactBook - Jordan.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/jo.html [Accessed 12 November 2012].

Central Intelligence Agency. 2012e. 'The World FactBook - Kuwait.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/ku.html [Accessed 12 November 2012].

Central Intelligence Agency. 2012f 'The World FactBook – Lebanon.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/le.html [Accessed 14 November 2012].

Central Intelligence Agency. 2012g. 'The World FactBook - Libya.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/ly.html [Accessed 14 November 2012].

Central Intelligence Agency. 2012h. 'The World FactBook – Morocco.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/mo.html [Accessed 14 November 2012].

Central Intelligence Agency. 2012i. 'The World FactBook - Oman.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/mu.html [Accessed 14 November 2012].

Central Intelligence Agency. 2012j. 'The World FactBook – Qatar.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/qa.html [Accessed 14 November 2012].

Central Intelligence Agency. 2012k. 'The World FactBook – Tunisia.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/ts.html [Accessed 14 November 2012].

Central Intelligence Agency. 2012l. 'The World FactBook – UAE.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/ae.html [Accessed 14 November 2012].

Central Intelligence Agency. 2012m. 'The World FactBook – Syria.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/sy.html [Accessed 14 November 2012].

Central Intelligence Agency. 2012n. 'The World FactBook - West Bank.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/we.html [Accessed 19 November 2012].

Central Intelligence Agency. 2012o. 'The World FactBook - Gaza Strip.' Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/gz.html [Accessed 19 November 2012].

Central Intelligence Agency. 2013. 'The World FactBook- Field Listing: Legal System.' Available at: https://www.cia.gov/library/publications/the-world-factbook/fields/2100.html [Accessed 17 June 2013].

Chan, W. K. & Wickramasinghe, N. 2006. 'Using the Internet for Financial Disclosure: the Australian Experience.' *Int. J. Electronic Finance,* 1:1, 118-50.

Chatterjee, B. & Hawkes, L. 2008. 'Does Internet Reporting Improve the Accessibility of Financial Information in a Global World? A Comparative Study of New Zealand and Indian Companies.' *Australasian Accounting Business and Finance Journal,* 2:4, 33-56.

Chiravuri, A. & Ambrose, P. 2002. 'A Theoretical Examination of Organizational Downsizing and its Effects on IS Organizational Learning, Memory, and Innovation.' *Proceedings Americas Conference on Information Systems (AMCIS), Dallas, Texas, Association for Information Systems. Paper 276*.

Choi, F. D. S. 1973. 'Financial Disclosure and Entry to the European Capital Market.' *Journal of Accounting Research,* Autumn, 159-75.

Clemens, B. W. & Douglas, T. J. 2005. 'Understanding strategic responses to institutional pressures.' *Journal of Business Research,* 58:9, 1205-13.

Collier, P. M. 2001. 'The Power of Accounting: A Field Study of Local Financial Management in a Police Force.' *Management Accounting Research,* 12:4, 465-86.

Collis, J. & Hussey, R. 2009. *Business Research: A Practical Guide for Undergraduate & Postgraduate Students.* 3ed Edition, Palgrave, Macmillan, London.

Cooke, T. E. 1992. 'The Impact of Size, Stock Market Listing and Industry Type on Disclosure in the Annual Reports of Japanese Listed Corporations.' *Accounting and Business Research*, 22:87, 229-37.

Coombs, W. T. 1998. 'The Internet as Potential Equalizer: New Leverage for Confronting Social Irresponsibility.' *Public Relations Review,* 24:3, 289-303.

Cormier, D., Magnan, M. & Van Velthoven, B. 2005. 'Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions?' *European Accounting Review,* 14:1, 3-39.

Craven, B. M. & Marston, C. L. 1999. 'Financial Reporting on the Internet by Leading UK companies.' *European Accounting Review,* 8:2, 321-33.

Crotty, M. 1998. *The Foundations of Social Research: Meaning and Perspective in the Research Process.* Second Edition, Allen & Unwin, Australia.
Damascus Securities Exchange. 2012. Available at: http://www.dse.sy/ [Accessed 15 November 2012].

Dancey, C. P. & Reidy, J. 2004. *Statistics without Maths for Psychology: Using SPSS for Windows.* Pearson Education Limited.

Davey, H. & Homkajohn, K. 2004. 'Corporate Internet Reporting: An Asian Example.' *Problems and Perspectives in Management,* 2, 211-27.

Davis, G. F. & Marquis, C. 2005. 'Prospects for Organization Theory in the Early Twenty-First Century: Institutional Fields and Mechanisms.' *Organization Science,* 16:4, 332–43.

Debreceny, R., Gray, G. L., & Mock, T. J. 2001. 'Financial Reporting Web Sites: What Users Want in Terms of Form and Content.' *The International Journal of Digital Accounting Research,* 1:1, 1-23.

Debreceny, R., & Gray, G. L. 2001. 'The Production and use of Semantically Rich Accounting Reports on the Internet: XML and XBRL.' *International Journal of Accounting Information Systems,* 2, 47-74.

Debreceny, R., Gray, G. L., & Rahman, A. 2002. 'The Determinants of Internet Financial Reporting.' *Journal of Accounting and Public Policy,* 21, 371-94.

Deegan, c. & Unerman, J. 2006. *Financial Accounting Theory: European Edition.* McGraw-Hill Education, Berkshire.

Deller, D., Stubenrath, M. & Weber, C. 1999. 'A Survey on the Use of the Internet for Investor Relations in the USA, the UK and Germany.' *European Accounting Review,* 8:2, 351-64.

Deloitte 2008. 'Financial Reporting Framework in Iraq.' Available at: http://www.iasplus.com/country/iraq.htm [Accessed 9 November, 2012].

Deloitte 2010. 'IFRSs in your Pocket.' Available at: http://www.deloitte.com/assets/Dcom-Turkey/Local%20Assets/Documents/turkey-en_audit_IFRS2010_250510.pdf [Accessed 9 November 2012].

Denscombe, M. 2003. *The Good Research Guide: For Small-scale Social Research Projects.* 2nd Edition, Open University Press, McGraw-Hill International.

Department of Statistics 2012. 'Jordan in Figures'. Available at: http://www.dos.gov.jo/dos_home_e/main/index.htm [Accessed 13 November 2012].

Desoky, A. M. & Mousa, G. A. 2009. 'The Impact of Firm Characteristics and Corporate Governance Attributes on Internet Investor Relations - Evidence from Bahrain.' In W. I. Mondal (Ed.) *Paper presented at ASBBS Proceedings of the 12th International Conference.* London School of Economics and Political Science, Bankside House.

Despina, A. C. & Demetrios, P. L. 2009. 'The Web-based Financial Reporting Adopted by the Listed Companies in the Athens Stock Exchange.' *Journal of Modern Accounting and Auditing,* 5:7, 7-20.

Dillard, J. F., Rigsby, J. T. & Goodman, C. 2004. 'The Making and Remaking of Organization Context: Duality and the Institutionalization Process.' *Accounting, Auditing & Accountability Journal,* 17:4, 506-42.

DiMaggio, P. J. & Powell, W. W. 1983. 'The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields.' *American Sociological Review,* 48:2, 147-60.

DiMaggio, P. J. & Powell, W. W. 1991. 'Introduction.' *In W. Powell & P. DiMaggio (Eds), The New Institutionalism in Organizational Analysis: 1-38*. Chicago: University of Chicago Press.

Dull, R. B., Graham, A. W., & Baldwin, A. A. 2003. 'Web-based Financial Statement: Hypertext Links to Footnotes and Their Effect on Decisions.' *International Journal of Accounting Information Systems*, 4:3, 185-203.

Dunne, T., Helliar, C., Lymer, A. & Mousa, R. 2009. 'XBRL: The Views of Stakeholders'. London, The Association of Chartered Certified Accountants.

Dunne, T. M., Helliar, C. V., Lymer, A. & Mousa, R. (forthcoming). 'Stakeholder Engagement in Internet Financial Reporting: The Diffusion of XBRL in the UK ' British Accounting Review.

Dutta, P. & Bose, S. 2007. 'Web-based Corporate Reporting in Bangladesh: An Exploratory Study.' *The Cost and Management*, 35:6, 29-45.

Easterby-Smith, M., Thorpe, R. & Lowe, A. 2002. *Management Research: An Introduction.* London: Sage.

Economic Development Board 2010. 'Annual Economic Review 2010, Sustainable Prosperity: A Successful Decade for Bahrain Completed, a Challenging New Decade Begun.' Available at: http://www.bahrainedb.com/en/EDBDocuments/Annual%20Economic%20Review.pdf.

Egyptian Financial Supervisory Authority 2012. 'Decision No. 15 Regarding Amending Listing and Delisting Rules.' Cairo, Egypt, Available at: http://www.efsa.gov.eg/content/efsa2_en/decisions_en/dec15_en.htm, [Accessed on 20/03/2012].

Egyptian Stock Exchange 2012. Available at: http://www.egx.com.eg/english/homepage.aspx [Accessed 12 November 2012].

El-Masri, T. G. 2005. 'Exploring Perceptions towards the Accounting Profession in Lebanon: Problems, Explanations and Remedies.' Unpublished Master Dissertation, the American University of Beirut, Beirut, Lebanon.

Elsayed, A. N. M. E. 2010. 'The Key Determinants of the Voluntary Adoption of Corporate Internet Reporting and its Consequences on Firm Value: Evidence from Egypt.' Unpublished PhD thesis, Plymouth Business School, University of Plymouth, Plymouth, UK.

Ettredge, M., Richardson, V. J. & Scholz, S. 2001. 'The Presentation of Financial Information at Corporate Web Sites.' *International Journal of Accounting Information Systems*, 2:3, 149-68.

Ettredge, M., Richardson, V. J. & Scholz, S. 2002. 'Dissemination of Information for Investors at Corporate Web Sites.' *Journal of Accounting and Public Policy*, 21:4-5, 357-69.

Ezat, A. 2008. 'Online Disclosure: An Analysis of the Egypt Listed Companies', *Proceedings of the Plymouth Postgraduate Symposium, 168-185, Available at: http://www.ppgs-research.org/2008%20proceedings.pdf#page=168*.

Falgi, K. 2009. 'Corporate governance in Saudi Arabia: a stakeholder perspective.' Unpublished PhD thesis, The University of Dundee, Dundee, UK.

Farag, S. M. 2009. 'The Accounting Profession in Egypt: Its Origin and Development.' *International Journal of Accounting*, 44:4, 403-14.

Feghali, T. 2003. 'Profile of the Information Society in the Republic of Lebanon.' United Nations, Economic and Social Commission for Western Asia (ESCWA), Available at: http://unpan1.un.org/intradoc/groups/public/documents/unescwa/unpan030627.pdf.

Fekete, S., Tudor, A. T. & Mutiu, A. 2009. 'Determinants of the Comprehensiveness of Corporate Internet Reporting by Romanian Listed Companies', [online at http://ssrn.com/paper=1517665].

Field, A. 2009. *Discovering Statistics Using SPSS*. SAGE.

Fields, T. D., Lys, T. Z. & Vincent, L. 2001. 'Empirical research on accounting choice.' *Journal of Accounting and Economics*, 31:1-3, 255-307.

Financial Accounting Standards Board (FASB) 1978. 'Statement of Financial Accounting Concepts No. 1: Objectives of Financial Reporting by Business Enterprises.'

Financial Accounting Standards Board (FASB) 1980. 'Statement of Financial Accounting Concepts No. 2: Qualitative Characteristics of Accounting Information.'

Financial Accounting Standards Board (FASB) 1985. 'Statement of Financial Accounting Concepts No. 6: Elements of Financial Statements.'

Financial Accounting Standards Board (FASB) 2000. 'Business Reporting Research Project: Electronic Distribution of Business Reporting Information.' *Steering Committee Report*. Retrieved July 2011, from FASB website: www.fasb.org.

Fordham, D. R. 1995. 'Connecting Your Company to the Internet.' *Management Accounting*, 77:3, 69-74.

Frumkin, P. & Galaskiewicz, J. 2004. 'Institutional Isomorphism and Public Sector Organizations.' *Journal of Public Administration Research and Theory*, 14:3, 283–307.

Gallhofer, S., Haslam, J. & Kamla, R. 2011. 'The Accountancy Profession and the Ambiguities of Globalisation in a Post-Colonial, Middle Eastern and Islamic Context: Perceptions of Accountants in Syria.' *Critical Perspectives on Accounting*, 22:4, 376–95.

Gandia, J. L. 2003. 'Intangibles Disclosure Information on Internet by Multinational Corporations.' *The International Journal of Digital Accounting Research*, 3:5, 61-99.

Garson, D. G. 2012. *Logistic Regression: Binomial and Multinomial*. Asheboro, NC: Statistical Associates Publishers.

Geerings, J., Bollen, L. H. H. & Hassink, H. F. D. 2003. 'Investor Relations on the Internet: A Survey of the Euronext Zone.' *The European Accounting Review*, 12:3, 567-79.

George, E., Chattopadhyay, P., Sitkin, S. B. & Barden, J. 2006. 'Cognitive Underpinnings of Institutional Persistence and Change: A Framing Perspective.' *Academy of Management Review*, 31:2, 347–65.

Ghani, E. K., Laswad, F., & Tooley, S. 2008. 'Do Digital Reporting Formats Assist Professional Users in Overcoming Functional Fixation in Recognition Versus Disclosure?' *British Accounting Association Annual Conference, 1-3 April*. Blackpool: Unpublished.

Ghani, E. K., Laswad, F., & Tooley, S. 2009. 'Digital Reporting Formats: Users' Perceptions, Preferences and Performances.' *The International Journal of Digital Accounting Research*, 9, 45-98.

Gibson, C. H. 2008. *Financial Reporting & Analysis: Using Financial Accounting Information.* Ohio USA: South-Western Cengage Learning.

Gioia, D. A. & Pitre, E. 1990. 'Multiparadigm Perspectives on Theory Building.' *Academy of Management Review*, 15:4, 584-602.

Glautier, M. W. E. & Underdown, B. 2001. *Accounting Theory and Practice.* 7th Edition, Person Education Limited, Edinburgh Gate.

Global Connections 2012. 'Country Guide: Qatar.' Available at: http://globalconnections.hsbc.com/united-kingdom/en/tools-data/country-guides/qa/audit-and-accountancy [Accessed 10 December 2012].

Global Edge 2012a. 'Iraq: Introduction.' Michigan State University, Available at: http://globaledge.msu.edu/Countries/Iraq [Accessed 8 November 2012].

Global Edge 2012b. 'Country Profile-Tunisia.' Michigan State University, Available at: http://globaledge.msu.edu/Countries/Tunisia [Accessed 14 November 2012].

Global Edge 2012c. 'Country Profile-UAE.' Michigan State University, Available at: http://globaledge.msu.edu/Countries/United-Arab-Emirates [Accessed 14 November 2012].

Global Edge 2012d. 'Country Profile-UAE.' Michigan State University, Available at: http://globaledge.msu.edu/Countries/Syria [Accessed 15 November 2012].

Government.ae 2012. 'The Official Portal of the United Arab Emirates.' Available at: http://www.government.ae/web/guest/geography [Accessed 13.11.2012].

Gowthorpe, C. 2004. 'Asymmetrical Dialogue? Corporate Financial Reporting via the Internet.' *Corporate Communications: An International Journal*, 9:4, 283-93.

Gowthorpe, C. & Amat, O. 1999. 'External Reporting of Accounting and Financial Information via the Internet in Spain.' *European Accounting Review*, 8:2, 365-71.

Gray, G., & Debreceny, R. 1997. 'Corporate Reporting on the Internet: Opportunities and Challenges.' *The Seventh Asian-Pacific Conference on International Accounting Issues*. Bangkok.

Greenwood, R. & Hinings, C. R. 1996. 'Understanding Radical Organizational Change: Bringing Together the Old and the New Institutionalism.' *Academy of Management Review*, 21:4, 1022-54.

Guba, E. G. & Lincoln, Y. S. 1994. *Competing Paradigms in Qualitative Research*. 1st Edition, in Denzin, N. and Lincoln, Y, (eds.), Handbook of Qualitative, Thousand Oaks, CA: sage.

Guerreiro, M. S., Rodrigues, L. L. & Craig, R. 2012. 'Voluntary Adoption of International Financial Reporting Standards by Large Unlisted Companies in Portugal – Institutional Logics and Strategic Responses.' *Accounting, Organizations and Society*, 37:7, 482-99.

Guler, I., Guillen, M. F. & Macpherson, J. M. 2002. 'Global Competition, Institutions, and the Diffusion of Organizational Practices: The International Spread of ISO 9000 Quality Certificates.' *Administrative Science Quarterly*, 47:2, 207-32.

Haasbroek, F. & Toit, A. S. A. d. 2003. 'Importance of Digital Annual Reports.' *South African Journal of Information Management*, 5:1.

Hadi, M. M. 2005. 'The Internet Financial Reporting by Kuwait Companies.' *European Journal of Scientific Research*, 1:2, 38-44.

Hanafi, R. A. 2006. 'An Exploration of Corporate Social and Environmental Disclosure in Egypt and the UK: A Comparative Study.' Unpublished PhD thesis, University of Glasgow, Glasgow, UK.

Hanieh, A. 1999. 'The WWW in Palestine: An Informational and Organizing Tool.' *Middle East Report*: 213, 41-43.

Haniffa, R. M. & Cooke, T. E. 2002. 'Culture, Corporate Governance and Disclosure in Malaysian Corporations.' *Emerald Management Reviews*, 38:3, 317-49.

Hannan, M. T. & Freeman, J. 1977. 'The Population Ecology of Organisations.' *American Journal of Sociology*, 82:5, 929-64.

Hassan, O. A. G. 2006. 'The Economic Consequences of Increased Disclosure in the Egyptian Emerging Capital Market.' Unpublished PhD thesis, University of Abertay, Dundee, UK.

Haveman, H. A. 1993. 'Follow the Leader: Mimetic Isomorphism and Entry into New Markets ' *Administrative Science Quarterly*, 38 4 593-627.

Hawley, A. 1968. 'Human Ecology ' *in David L. Sills (Ed.) International Encyclopaedia of the Social Sciences, New York: NY, Macmillan*.

Hedlin, P. 1999. 'The Internet as a Vehicle for Investor Relations: the Swedish Case.' *European Accounting Review*, 8:2, 373-81.

Hindi, N. M. & Rich, J. 2010. 'Financial Reporting on the Internet: Evidence from the Fortune 100.' *Management Accounting Quarterly*, 11:2, 11-21.

Hodge, F. & Pronk, M. 2006. 'The Impact of Expertise and Investment Familiarity on Investors' Use of Online Financial Report Information.' *Journal of Accounting, Auditing & Finance*, 21:3, 267-92.

Hodgson, G. M. 2006. *Economics in the Shadows of Darwin and Marx: Essays on Institutional and Evolutionary Themes.* Edward Elgar Publishing, Inc. USA.

Hoffman, A. J. 1999. 'Institutional Evolution and Change: Environmentalism and the U.S. Chemical Industry.' *Academy of Management Journal*, 42:4, 351-71.

Hoffman, C. 2006. *Financial Reporting Using XBRL*. UBmatrix, Inc. IFRS and US GAAP Edition.

Holm, C. 2000. 'Financial Reporting on the Internet - An Examination across Industries and Company Size.' *Paper prepared for presentation at the 23rd Annual Congress of the European Accounting Association, Munich, Germany, March 29-31, 2000.*

Homayoun, S. & Abdul Rahman, R. A. 2010. 'Determinants of Web-Based Corporate Reporting Among Top Public Listed Companies in Malaysia.' *International Journal of Arts and Sciences*, 3:13, 187-212.

Hopper, T. & Powell, A. 1985. 'Making Sense of Research into the Organizational and Social Aspects of Management Accounting: A Review of Its Underlying Assumptions.' *Journal of Management studies*, 22:5, 429-65.

Hoskisson, R. E., Eden, L., Lau, Ch. M. & Wright, M. 2000 'Strategy in Emerging Economies' *Academy of Management Journal,* 43:3, 249-67.

Hossain, M. & Hammami, H. 2009. 'Voluntary Disclosure in the Annual Reports of an Emerging Country: The Case of Qatar.' *Advances in Accounting*, 25:2, 255–65.

Hossain, M., Momin, M. A. & Leo, S. 2012. 'Internet Financial Reporting and Disclosure by Listed Companies: Further Evidence from an Emerging Country.' *Corporate Ownership & Control,* 9:4, 351-66.

Hunter, S. A., & Smith, M. 2009. 'Impact of Internet Financial Reporting on Emerging Markets.' *Journal of International Business Research*, 8:2, 21-41.

Huntington, S. P. 1968. *Political Order in Changing Societies.* London: New Haven and London Yale University Press.

Hussey, J. & Hussey, R. 1997. *Business Research Method.* McMillan Press Ltd.

Hussey, R. 1999. *Dictionary of Accounting.* Oxford: Oxford University Press.

IASB/FASB 2010. 'The objective of general purpose financial reporting.' Available at: http://www.eifrs.ifrs.org/eifrs/files/136/conceptual%20fw%202010_130.pdf [Accessed 11 June 2011].

Institut Arabe des Chefs d'Entreprises 2008. 'Code of Best Practice of Corporate Governance: Tunisia.' Institut Arabe des Chefs d'Entreprises.

Institute of Chartered Accountants in England & Wales (ICAEW) 2004. 'Information for Better Markets: New Reporting Models for Business.' *ICAEW research report*. Institute of Chartered Accountants in England & Wales, UK.

International Accounting Standards Committee (IASC) 1989. 'Framework for the Preparation and Presentation of Financial Statements.' London.

International Federation of Accountants 2013. 'Membership & Compliance Program.' International Federation of Accountants (IFAC). Available at: http://www.ifac.org/about-ifac/membership/members?letter=L [Accessed 2 July 2013].

International Monetary Fund 2004. 'Algeria: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Monetary and Financial Policy Transparency and Banking Supervision.' Available at: http://www.imf.org/external/pubs/ft/scr/2004/cr04138.pdf [Accessed 5 November 2012].

Internet World Stats. 2010a. 'Internet users in the Middle East.' Available at: http://www.internetworldstats.com/stats1.htm#africa [Accessed 13 November 2012].

Internet World Stats. 2010b. 'Middle East.' Available at: http://www.internetworldstats.com/stats5.htm [Accessed 13 November 2012].

Internet World Stats. 2010. 'Internet Users in Africa.' Available at: http://www.internetworldstats.com/stats1.htm#africa [Accessed 12 November 2012].

Iraq Stock Exchange. 2012. Available at: http://72.52.252.89/isxportal/portal/homePage.html [Accessed 9 November 2012].

Ismail, T. H. 2002. 'An Empirical Investigation of Factors Influencing Voluntary Disclosure of Financial Information on the Internet in the GCC Countries', *SSRN eLibrary*, [online at http://ssrn.com/paper=420700].

Jaggi, B. & Low, P. Y. 2000. 'Impact of Culture, Market Forces, and Legal System on Financial Disclosures.' *The International Journal of Accounting*, 35:4, 495-519.

Jan, P.-T., Lu, H.-P. & Chou, T.-C. 2012. 'The Adoption of E-Learning: An Institutional Theory Perspective.' *The Turkish Online Journal of Educational Technology*, 3:11, 326-43.

Jensen, R. E., & Xiao, J. Z. 2001. 'Customized Financial Reporting, Networked Databases, and Distributed File Sharing.' *Accounting Horizons*, 15:3, 209-22.

Jones, M. J. & Xiao, J. Z. 2004. 'Financial Reporting on the Internet by 2010: a consensus view.' *Accounting forum*, 28:3, 237-63.

Joshi, P. L. & Al-Modhahki, J. 2003. 'Financial Reporting on the Internet: Empirical Evidence from Bahrain and Kuwait.' *Asia Review of Accounting*, 88:1, 88-101.

Kamal, A. 2009. *Current Issues in the Middle East Teaneck. Global Education, Fairleigh Kickincson University*.

Kamla, R., Gallhofer, S. & Haslam, J. 2012. 'Understanding Syrian Accountants' Perceptions of, and Attitudes towards, Social Accounting.' Accounting, Auditing & Accountability Journal, 25:7, 1170 - 205.

Kelton, A. S. & Yang, Y.-w. 2008. 'The Impact of Corporate Governance on Internet Financial Reporting.' *Journal of Accounting and Public Policy,* 27:1, 62-87.

Kernan, K. 2009. 'The Story of Our New Language: Personalities, Cultures, and Politics Combine to Create a Common, Global Language for Business.' American Institute of Certified Public Accountants (AICPA).

Ketokivi, M. A. & Schroeder, R. G. 2004. 'Strategic, structural contingency and institutional explanations in the adoption of innovative manufacturing practices.' *Journal of Operations Management,* 22:1, 63-89.

Khadaroo, M. I. 2005. 'Business Reporting on the Internet in Malaysia and Singapore: A comparative Study.' *Corporate Communications: An International Journal,* 10:1, 58-68.

Khan, M. N. A. A., Bajaher, M. S. A. & Ismail, N. A. 2007. 'Internet Financial Reporting by Saudi Companies.' *Journal of Muamalat and Islamic Finance Research,* 4:1, 96-115.

Kholeif, A. O. R., Abdel-Kader, M. & Sherer, M. 2007. 'ERP customization failure Institutionalized accounting practices, power relations and market forces.' *Journal of Accounting & Organizational Change,* 3:3, 250-69.

Kilani, K. A. 1988. 'The Evolution and Status of Accounting in Libya.' Unpublished PhD thesis, University of Hull, Hull, UK.

Kirat, M. 2007. 'Promoting online media relations: Public relations departments' use of Internet in the UAE.' *Public Relations Review,* 33:2, 166-74.

Kleinbaum, D. G. & Klein, M. 2010. *Logistic regression: A self-learning text*. 3rd Edition. New York: Springer.

Kribat, M. M. J. 2009. 'Financial Disclosure Practices in Developing Countries: Evidence from the Libyan Banking Sector.' Unpublished PhD thesis, University of Dundee, Dundee, UK.

Krishnaswami, O. R. & Satyaprasad, B. G. 2010. *Business Research Methods.* Mumbai, IND: Global Media.

Kuwait Stock Exchange. 2012. Available at: http://www.kse.com.kw/Default.aspx [Accessed 13 November 2012].

Lamani, D. & Çepani, L. 2011. 'Internet Financial Reporting by Banks and Insurance Companies in Albania.' *The Romanian Economic Journal,* 14:42, 159-74.

Lammers, J. C. & Barbour, J. B. 2006. 'An Institutional Theory of Organisational Communication.' *Institutional Organizational Communication,* 16:3, 356–77.

Larrán, M., & Giner, B. 2002. 'The Use of the Internet for Corporate Reporting by Spanish Companies.' *The International Journal of Digital Accounting Research,* 2:1, 53-82.

Lave, J. & Wenger, E. 1991. *Situated Learning: Legitimate Peripheral Participation.* Cambridge: Cambridge University Press.

Leventis, S. N. 2001. 'Voluntary Disclosure in an Emerging Capital Market: The Case of the Athens Stock Exchange.' Unpublished PhD thesis, University of Strathclyde, Glasgow, UK.

Library of Congress - Federal Research Division. 2005. 'Country Profile: Syria '. Available at: http://lcweb2.loc.gov/frd/cs/profiles/Syria.pdf [Accessed 14 November 2012].

Library of Congress - Federal Research Division 2006. 'Country Profile: Saudi Arabia ', Available at: http://lcweb2.loc.gov/frd/cs/profiles/Saudi_Arabia.pdf [Accessed 14 November 2012].

Libyan Stock Market 2012. Available at: http://www.lsm.ly/Arabic/Pages/default.aspx [Accessed 14 November 2012].

Lodhia, S. K., Allam, A. & Lymer, A. 2004. 'Corporate Reporting on the Internet in Australia: An Exploratory Study.' *Australian Accounting Review*, 14:3, 64-71.

Lybaert, N. 2002. 'On-Line Financial Reporting. An Analysis of the Dutch Listed Firms.' *The International Journal of Digital Accounting Research*, 2:4, 195-234.

Lymer, A., & Tallberg, A. 1997. 'Corporate Reporting and the Internet - a Survey and Commentary on the Use of the WWW in Corporate Reporting in the UK and Finland.' *the 20th Annual Congress of the European Accounting Association*. Graz, Austria.

Lymer, A. 1997. 'The Use of the Internet for Corporate Reporting - a discussion of the issues and survey of current usage in the UK', *Journal of Financial Information Systems*, [online at http://www.lymer.co.uk/articles/index.html].

Lymer, A., Debreceny, R., Gray, G., & Rahman, A. 1999. 'Business Reporting on the Internet.' International Accounting Standards Committee.

Lymer, A. 1999. 'Internet and the Future of reporting in Europe.' *European Accounting Review*, 8:2, 289-301.

Lymer, A., & Debreceny, R. 2003. 'The Auditor and Corporate Reporting on the Internet: Challenges and Institutional Responses.' *International Journal of Auditing*, 7:2, 103-20.

Mahmud, M. B. & Russell, A. 2003. 'An Empirical Investigation of the Development of Accounting Education and Practice in Libya, and of Strategies for Enhancing Accounting Education and Accounting Practice in Libya.' *Research in Accounting in Emerging Economies*, 5, 197-236.

Maps of World 2012a. 'Morocco.' Available at: http://www.mapsofworld.com/morocco/geography-and-history/morocco-geography.html [Accessed 7 November 2012].

Marashdeh, O. 1996. *The Jordanian Economy.* Amman: Al-Jawal Corporation.

Mardini, G. H. 2012. 'The Impact of IFRS 8 on Segmental Reporting by Jordanian Listed Companies: An Analysis of Disclosure Practices and Some Stakeholders' Perceptions.' Unpublished PhD thesis, University of Dundee, Dundee, UK.

Marriott, P., Edwards, J. R., & Mellett, H. J. 2002. 'Introduction to Accounting'. SAGE.

Marston, C. 2003. 'Financial Reporting on the Internet by Leading Japanese Companies.' *An International Journal,* 8:1, 23-34.

Marston, C. & Polei, A. 2004. 'Corporate Reporting on the Internet by German Companies.' *International Journal of Accounting Information Systems,* 5:3, 285-311.

Marston, C. L. & Shrives, P. J. 1991. 'The Use of Disclosure Indices in Accounting Research: A Review Article.' *The British Accounting Review,* 23:3, 195-210.

Mehanna, O. 2010. 'Internet and the Egyptian Public Sphere.' *Africa Development,* XXXV:4, 195–209.

Mendes-Da-Silva, W. & Christensen, T. E. 2004. 'Determinants of Voluntary Disclosure of Financial Information on the Internet by Brazilian Firms', *SSRN eLibrary,* [online at http://ssrn.com/paper=638082].

Meyer, J. W. & Rowan, B. 1977. 'Institutionalised Organisations: Formal Structure as Myth and Ceremony.' *American Journal of Sociology,* 83:2, 340-63.

Minister of Industry and Commerce 2010. 'The Corporate Governance Code of the Kingdom of Bahrain.' Minister of Industry and Commerce.

Ministry of Foreign Affairs 2010. 'Saudi Arabia.' Available at: http://www.mofa.gov.sa/sites/mofaen/Pages/Default.aspx [Accessed 31 October 2012].

Mizruchi, M. S. & Fein, L. C. 1999. 'The Social Construction of Organizational Knowledge: A Study of the Uses of Coercive, Mimetic, and Normative Isomorphism.' *Administrative Science Quarterly,* 44:4, 653-83.

Mohamed, E. & Oyelere, P. 2008. 'A Survey of Internet Financial Reporting in Bahrain.' *Studies in Business and Economics,* 14:1, 31-49.

Mohamed, E. K. A. 2010. 'Internet Financial Reporting (IFR) in the GCC: extent and Practices.' *Int. J. Accounting and Finance,* 2:1, 113-29.

Mohamed, E. K. A., Oyelere, P. & Al-Busaidi, M. 2009. 'A Survey of Internet Financial Reporting in Oman.' *International Journal of Emerging Markets,* 4:1, 56-71.

Moll, J., Burns, J. & Major, M. 2006. 'Institutional Theory.' In Z. Hoque (Ed.) *Methodological Issues in Accounting Research: Theories and Issues*: 183-205, London: Spiramus Press Ltd.

Momany, M. T. & Al-Shorman, S. A.-D. 2006. 'Web-Based Voluntary Financial Reporting of Jordanian Companies.' *International Review of Business Research Paper,* 2:2, 127-39.

Momany, M. T. & Pillai, R. 2012. 'Internet Financial Reporting In UAE- Analysis and Implications.' *Global Review of Accounting & Finance,* March 2013, 1-19.

Morgan, G. & Smircich, L. 1980. 'The Case for Qualitative Research.' *Academy of Management Review,* 5:4, 491-500.

Morokko-Info 2012. 'History of Morocco - A Trip Down Memory Lane.' Available at: http://www.marokko-info.nl/english/history-of-morocco/ [Accessed 28 November 2102].

Mukherjee, A., & Hanif, M. 2003. *Financial Accounting*. Tata McGraw- Hill.

Muscat Securities Market 2012 Available at: http://www.msm.gov.om/ [Accessed 14 November 2012].

Mutawaa, A. A. & Hewaidy, A. M. 2010. 'Disclosure Level and Compliance with IFRSs: An Empirical Investigation of Kuwaiti Companies.' *International Business& Economics Research Journal,* 9:5, 33-50.

Naser, K., Al-Hussaini, A., Al-Kwari, D. & Nuseibeh, R. 2006. 'Determinants of Corporate Social Disclosure in Developing Countries: The Case of Qatar.' *Advances in International Accounting,* 19, 1-23.

Naser, K. & Nuseibeh, R. 2003. 'Quality of Financial Reporting: Evidence from the Listed Saudi non-financial companies.' *The International Journal of Accounting,* 38:1, 41-69.

National Commission on Corporate Governance 2008 'Moroccan Code of Good Corporate Governance Practices.' Available at: http://www.ecgi.org/codes/documents/morocco_code_march2008_en.pdf [Accessed 8 November 2012].

Ng, E. J. & Koh, H. C. 1994. 'An Agency Theory and Probit Analytic Approach to Corporate Non-mandatory Disclosure Compliance.' *Asia-Pacific Journal of Accounting,* 1:1, 29-44.

Nobes, C. 1992. *Introduction to Financial Accounting.* Routledge.

Nwokah, N. G., Kiabel, B. D. & Briggs, A. E. 2009. 'Philosophical Foundations and Research Relevance: Issues for Marketing Information Research.' *European Journal of Scientific Research,* 33:3, 429-37.

Obaidat, A. N. 2007. 'Auditors Compliance with International Standards on Auditing (ISAs): Evidence form Jordan.' *Journal of Social Sciences,* 3:4, 185-89.

O'Kelly, C. 2000. 'Business Reporting on the Internet: Reporting Gets Personal.' *Accountancy Ireland,* 32:4, 28-30.
Oliver, C. 1991. 'Strategic Responses to Institutional Processes.' *The Academy of Management Review,* 16:1, 145-79.

Oliver, C. 1997. 'The Influence of Institutional and Task Environment Relationships on Organizational Performance: The Canadian Construction Industry.' *Journal of Management studies,* 34:1, 99-124.

Oman News Agency 2012 'Oman Geographic Location.' Available at: http://www.omannews.gov.om/ona/english/Geographic_Location.jsp [Accessed 31 October 2012].

OpenNet Initiative 2012 'Internet Filtering in Morocco.' Available at: http://opennet.net/research/profiles/morocco [Accessed 8 November 2012].

Owusu-Ansah, S. 1998. 'The Impact of Corporate Attributes on the Extent of Mandatory Disclosure and Reporting by Listed Companies in Zimbabwe.' *The International Journal of Accounting*, 33:5, 605-31.

Oxford Business Group 2010. 'The Report: Algeria 2010.' [London, U.K.]: Oxford Business Group.

Oxford Business Group 2011. 'The Report, Bahrain 2011.' [London, U.K.]: Oxford Business Group.

Oyelere, P. & Kuruppu, N. 2010. 'Determinants of Internet Financial Reporting in Emerging Economies: A Study of Listed Companies in the United Arab Emirates.' *Paper presented at the 2010 AFAANZ Annual Conference*. Christchurch, New Zealand.

Oyelere, P. & Kuruppu, N. 2012. 'Voluntary internet financial reporting practices of listed companies in the United Arab Emirates.' *Journal of Applied Accounting Research*, 13:3, 298-315.

Oyelere, P., Laswad, f. & Fisher, R. 2003. 'Determinants of Internet Financial Reporting by New Zealand Companies.' *Journal of International Financial Management and Accounting*, 14:1, 26-63.

Palestine Exchange 2012. Available at: http://www.pex.ps/PSEWebSite/Entrance.aspx [Accessed 19 November 2012].

Palestinian Investment Promotion Agency 2012. 'Commercial Laws.' Available at: http://www.pipa.gov.ps/comercial_laws.asp#1 [Accessed 22 November 2012].

Pallant, J. 2007. *SPSS- Survival Manual: A Step by Step Guide to Data analysis using SPSS for Windows.* 3rd Edition. Berkshire: Open University Press- the McGraw-Hill companies.

Pande, J. 2009. 'Research in Sociology: Areas, Method and Guidelines.' Swastik Publishers & Distributors. It is also available at Dundee University library (Electronic copy): http://site.ebrary.com/lib/dundee/docDetail.action?docID=10417637.

Peng, C.-Y. J., Lee, K. L. & Ingersoll, G. M. 2002. 'An Introduction to Logistic Regression Analysis and Reporting.' *The Journal of Educational Research*, 96:1, 3-14.

Peng, C.-Y. J. & So, T.-S. H. 2002. 'Logistic Regression Analysis and Reporting: A Primer.' *Understanding Statistics*, 1:1, 31-70.

Pervan, I. 2006. 'Voluntary Financial Reporting on the Internet - Analysis of the Practice of Stock-Market Listed Croatian and Slovene Joint Stock Companies.' *Financial Theory and Practice*, 30:1, 1-27.

Pervan, I. 2009. 'Trends of Voluntary Internet Reporting in Croatia: Analysis for the Period 2005-2007.' *Interdisciplinary Management Research,* 5, 617-25.

Petravick, S., & Gillett, J. 1996. 'Financial Reporting on the World Wide Web.' *Management Accounting,* 78:1, 26-29.

Petravick, S. 1999. 'Online Financial Reporting.' *The CPA Journal,* 69:2, 33-37.

Pirchegger, B. & Wagenhofer, A. 1999. 'Financial Information the Internet: A Survey of the Homepages of Austrian Companies.' *European Accounting Review,* 8:2, 383-95.

Piro, T. J. 1998. *The Political Economy of Market Reform in Jordan.* 1st Edition, Oxford, Rowman & Littlefield Publishers Inc.

Political Resources 2012 'politics of Iraq.' Available at: http://www.politicalresources.net/iraq.htm [Accessed 8 November 2012].

Poon, P.-L., Li, D. & Yu, Y. T. 2003. 'Internet Financial Reporting.' *Information Systems Control Journal,* 1, 1-4.

Prebowo, K. S. A. R. 2006. 'Factors Influencing the Extent of Web-Based Disclosure: An Empirical Analysis of Indonesian Manufacturing Firms.' *Journal Akuntansi Dan Keuangan,* 8:2, 92-98.

Premuroso, R. F. & Bhattacharya, S. 2008. 'Do early and voluntary filers of financial information in XBRL format signal superior corporate governance and operating performance?' *International Journal of Accounting Information Systems,* 9:1, 1-20.

PricewaterhouseCoopers 2012. 'IFRS adoption by country.' Available at: http://www.pwc.com/us/en/issues/ifrs-reporting/country-adoption/index.jhtml [Accessed 11.11.2012].

Qatar Exchange 2012 Available at: http://www.qe.com.qa/ [Accessed 14 November 2012].

Qatar Financial Market Authority 2009. 'Corporate Governance Code for Companies Listed in Markets Regulated by the Qatar Financial Markets Authority.' Qatar Financial Market Authority.

Quagli, A. & Riva, P. 2009. 'Do Financial Websites Meet the Users' Information Needs ?.' Research Forum of the Spanish Journal of Finance and Accounting, Cartagena - Spain,18 to 20 November 2009, Available at: http://www.viiaccountingworkshop.upct.es/papers/cbd3d6994d491da70fe56b6abda748bd.pdf.

Radebaugh, L. H. & Gray, S. J. 1997. *International Accounting and Multinational Enterprises.* 4th Edition, John Wiley & Sons (New York).

Ravichandran, T., Han, S. & Hasan, I. 2009. 'Effects of Institutional Pressures on Information Technology Investments: An Empirical Investigation.' *IEEE Transactions on Engineering Management,* 56:4, 677-91.

Remenyi, D., Williams, B., Money, A. & Swartz, E. 1998. *Doing research in Business and management: an introduction to process and method.* Sage Publications: London.

Ribeiro, J. A. & Scapens, R. W. 2006. 'Institutional theories in management accounting change: contributions, issues and paths for development.' *Qualitative Research in Accounting & Management,* 3:2, 94-111.

Rodrigues, L. L. & Menezes, C. 2003. 'Financial Reporting on the Internet: The Portuguese Case.' *RAE electron,* 2:2, 1-22.

Roudi-Fahimi, F. & Kent, M. M. 2007. 'Challenges and Opportunities—The Population of the Middle East and North Africa.' *Population Bulletin,* 62:2, 1-18.

Rowbottom, N., Allam, A. & Lymer, A. 2005. 'An exploration of the potential for studying the usage of investor relations information through the analysis of Web server logs.' *International Journal of Accounting Information Systems,* 6:1, 31-53.

Rowbottom, N. & Lymer, A. 2009. 'Exploring the Use of Online Corporate Reporting Information.' *Journal of Emerging Technologies in Accounting,* 6:1, 27-44.

Rowbottom, N. & Lymer, A. 2010. 'Exploring the Use and Users of Narrative Reporting in the Online Corporate Annual Report.' *Journal of Applied Accounting Research,* 11:2, 90-108.

Ryan, B., Scapens, R. W. & Theobald, M. 2002. *Research Method and Methodology in Finance and Accounting.* Second Edition, Thomson Learning, Surrey.

Salawu, R. O. 2009. 'Financial Reporting on the Internet by Quoted Companies in Nigeria.' Paper presented at The 10th Annual Conference of Repositioning African Business and Development for the 21st Century, Accessed on 20th of July 2011 at http://www.iaabd.org/2009_iaabd_proceedings/track1a.pdf.

Sarkar, S. K., Midi, H. & Rana, S. 2011. 'Detection of Outliers and Influential Observations in Binary Logistic Regression: An Empirical Study.' *Journal of Applied Sciences,* 11:1, 26-35.

Saudi Embassy in USA 2012. 'About Saudi Arabia.' Available at: http://www.saudiembassy.net/ [Accessed 31 October 2012].

Saudi Organization for Certified Public Accounting 2012 'The Royal Decree (No. M/6).' Available at: http://www.socpa.org.sa/engl/index.php [Accessed 31 October 2012].

Saunders, M., Lewis, P. & Thornhill, A. 2007. *Research Methods for Business Students.* Harlow (u. a.): Financial Times Prentice Hall.

Saunders, M., Lewis, P. & Thornhill, A. 2009. *Research Methods for Business Students.* 5th Edition, Prentice Hall, Financial Times.

Scapens, R. W. 2006. 'Understanding management accounting practices: A personal journey.' *The British Accounting Review,* 38:1, 1-30.

Scott, W. R. 1995. *Institutions and Organisations* London: Sage.

Scott, W. R. 2001. *Institutions and Organisations.* 2nd Edition, London: Sage Publications Ltd.

Scott, W. R. & Meyer, J. W. 19991. 'The Organisation of Societal Sectors: Propositions and Early Evidence.' In W. W. Powell & P. J. DiMaggio (Eds.). *The New Institutionalism in Organisational Analysis:* 108-40. The University of Chicago Press.

Scott, W. R., Ruef, M., Mendel, P. J. & Caronna, C. A. 2000. *Institutional Change and healthcare Organizations: From Professional Dominance to Managed Care.* Chicago: University of Chicago Press.

Sekaran, U. 2003. *Research methods for business: a skill-building approach.* Fourth Edition, Toronto: John Wiley & Sons, Ltd.

Selznick, P. 1957. *Leadership in Administration - A Sociological Interpretation.* Harper and Row, Publishers.

Shaheen, Y. 2010. 'The Perceived Usefulness of Information for Investment Decisions: Evidence from Palestine Securities Exchange (PSE).' *Hebron University Research Journal,* 5:2, 283 – 307.

Shukla, A. & Gekara, M. G. 2010. 'Corporate Reporting in Modern Era: A Comparative Study of Indian and Chinese Companies.' *Global Journal of International Business Research,* 3:3, 42-56.

Silk Road Management 2012. 'Press Release '. Available at: http://www.silkroadm.com/PR_SRM_launches_SILKIQ_Feb1_2012.pdf [Accessed 21 November 2012].

Singhvi, S. S. & Desai, H. B. 1971. 'An Empirical Analysis of the Quality of Corporate Financial Disclosure.' *The Accounting Review,* 46:1, 129-38.

Sourial, M. S. 2004. 'Corporate Governance in the Middle East and North Africa: An Overview.' *Social Science Research Network, Electronic Publishing, Inc. Available at SSRN: http://ssrn.com/abstract=508883 or http://dx.doi.org/10.2139/ssrn.508883.*

Spaul, B. 1997. 'Corporate Dialogue in the Digital Age.' *Corporate Governance:* 1-20. London: The Institute of Chartered Accountants in England & Wales.

Sprent, P. & Smeeton, N. C. 2001. *Applied Nonparametric Statistical Methods.* Chapman & Hall/CRC.

Srivastava, S. C., Teo, T. S. H. & Subramanian, A. M. 2009. 'Rational versus Institutional Perspectives in Organizational Web Sites', *Communications of the Association for Information Systems,* 24:36. , [online at http://aisel.aisnet.org/cais/vol24/iss1/36].

Suchman, M. C. 1995. 'Managing Legitimacy: Strategic and Institutional Approached.' *Academy of Management Review,* 20:3, 571-610.

Tadawul 2012. Available at: http://www.tadawul.com.sa [Accessed 31 October 2012].

Tait, D. 2005. 'Accounting, Auditing and Taxation in Bahrain.' In M. Terterov & A. Shoult (Eds.) *Doing Business with Bahrain*. GMB Publishing Ltd.

Terterov, M. 2005. *Doing business with Bahrain: a guide to investment opportunities and business practice.* London; Sterling, VA: GMB Pub. ; Distributed by Kogan Page.

The World Bank 2002. 'Report on the Observance of Standards and Codes (ROSC), Kingdom of Morocco, Accounting and Auditing.' Available at: http://www.worldbank.org/ifa/Moroccoroscaa.pdf [Accessed 7 November 2012].

The World Bank 2003. 'Republic of Lebanon: Report on the Observance of Standards and Codes: Accounting and Auditing.' Available at: http:// worldbank.org/ifa/rosc_aa_lbn.pdf [Accessed 22 November 2012].

The World Bank 2006. 'Report on the Observance of Standards and Codes (ROSC): Republic of Tunisia, Accounting and Auditing.' Available at: https://openknowledge.worldbank.org/handle/10986/8145.

The World Bank 2010. 'Report on the Observance of Standards and Codes (ROSC), Corporate Governance, Country Assessment, Kingdom of Morocco '. Available at: http://js.vc/io/viewer/FlexPaperViewer.swf?SwfFile=http%3A%2F%2Fwww.pdfio.com%2Fio%2Fswf%2F20121016%2F065535_804672.swf&FullScreenAsMaxWindow=true&FitPageOnLoad=false&ZoomTransition=easeOut&PrintEnabled=true&ZoomInterval=0.1&Scale=0.6&ProgressiveLoading=true&FitWidthOnLoad=false&ZoomTime=0.5 [Accessed 11 December 2012].

The World Bank 2010a. 'Report on the Observance of Standards and Codes (ROSC) Corporate Governance, Country Assessment, The Kingdom of Morocco.' Available at: http://www.worldbank.org/ifa/rosg_cg_morocco_2010_eng.pdf [Accessed 7 November 2012].

The World Bank 2010b. 'Report on the Observance of Standards and Codes (ROSC), Accounting and Auditing: West Bank and Gaza.' Available at: http://www.worldbank.org/ifa/rosc_aa_wbg.pdf [Accessed 22 November 2012].

The World Bank 2012. 'Market Capitalisation.' Available at: http://search.worldbank.org/data?qterm=market%20capitalization&language=EN [Accessed 10 November 2012].

The World Bank 2012a. 'Middle East and North Africa.' Available at: http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/0,,menuPK:247619~pagePK:146748~piPK:146812~theSitePK:256299,00.html [Accessed 12 Novermber 2012].

The World Bank 2012b. 'Gross National Income by Countries.' Available at: http://data.worldbank.org/indicator/NY.GNP.PCAP.CD [Accessed12 November 2012].

The World Bank 2012c. 'Gross Domestic Product by Countries.' Available at: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD [Accessed14 November 2012].

The World Bank 2012d. 'Inflation by Countries.' Available at: http://data.worldbank.org/indicator/FP.CPI.TOTL.ZG [Accessed 14 November 2012].

Tolbert, P. S. & Zucker, L. G. 1983. 'Institutional Sources of Change in the Formal Structure of Organisation: The Diffusion of Civil Service Reform, 1880-1935.' *Administrative Science Quarterly,* 28: March, 22-39.

Tolbert, P. S. & Zucker, L. G. 1994. 'Institutional Analyses of Organizations: Legitimate but not Institutionalized.' *Institute for Social Science Research,* 6:5, 1-32.

Townley, B. 1997. 'The Institutional Logic of Performance Appraisal.' *Organization Studies,* 18:2, 261-85.

Trabelsi, S. & Labelle, R. 2006. 'Evidence that Corporate Websites is a Part of the Firm's Overall Disclosure Package.' *paper presented at the Business Research Conference*. Orlando, Florida, USA.

Tunis Stock Exchange 2012 Available at: http://www.bvmt.com.tn/ [Accessed 14 November 2012].

Turrent, G. d. C. B. & Ariza, L. R. 2012. 'Corporate Information Transparency on the Internet by Listed Companies in Spain (IBEX35) and Mexico (IPYC).' *The International Journal of Digital Accounting Research,* 12:18, 1 - 37.

Tuttle, B. & Dillard, J. 2007. 'Beyond Competition: Institutional Isomorphism in U.S. Accounting Research.' *Accounting Horizons*, 21:4, 387–409.

Tuttle, B. & Dillard, J. 2007. 'Beyond Competition: Institutional Isomorphism in U.S. Accounting Research.' *Accounting Horizons*, 21:4, 387–409.

Unerman, J. & Bennett, M. 2004. 'Increased stakeholder dialogue and the internet: towards greater corporate accountability or reinforcing capitalist hegemony?' *Accounting, Organizations and Society,* 29:7, 685-707.

United Nations 2011. 'Demographic Yearbook – Jordan.' Available at: http://unstats.un.org/unsd/demographic/products/dyb/dybsets/2009-2010.pdf [Accessed 13 November 2012].

United Nations 2011a. 'After much wrangling, general assembly seats National Transitional Council of Libya as country's representative for Sixty-Sixth session'. Available at: http://www.un.org/News/Press/docs/2011/ga11137.doc.htm [Accessed 6 December 2012].

United Nations 2012. 'UN E-Government Survey: 2010.' Available at http://www.unpan.org/egovkb/global_reports/08report.htm [Accessed 12 November 2012].

Uyar, A. 2012. 'Determinants of Corporate Reporting on the Internet: An Analysis of Companies Listed on the Istanbul Stock Exchange (ISE).' *Managerial Auditing Journal,* 27:1, 87-104.

Vermeulen, P., Ansari, S. & Knoben, J. 2009. 'Ideological Communities, Issue Interpretation and the Implementation of New Practices in Dutch Childcare.' Second International Conference on: Institutions, Innovation and Space at University of Alberta on June 21-23 2009.

Verrecchia, R. E. 2001. 'Essays on Disclosure.' *Journal of Accounting and Economics*, 32:1-3, 97-180.

Wagenhofer, A. 2003. 'Economic Consequences of Internet Financial Reporting.' *Schmalenbach Business Review,* 55 : October, 262-79.

Wahdan, M. A., Spronck, P., Ali, H. F., Vaassen, E. & Herik, H. J. V. D. 2005. 'Auditing in Egypt: A Study of the Legal Framework and Professional Standards. Conference of Maastricht School of Management. Netherlands.'

Wallace, R. S. O., & Naser, K. 1995. 'Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the stock exchange of Hong Kong.' *Journal of Accounting and Public Policy,* 14:4, 311-68.

Wallace, R. S. O., Naser, K. & Mora, A. 1994. 'The Relationship Between the Comprehensiveness of Corporate Annual Reports and Firm Characteristics in Spain.' *Accounting and Business Research,* 25:97, 41-53.

Warf, B. & Vincent, P. 2007. 'Multiple geographies of the Arab Internet.' *Area,* 39:1, 83-96.

Weber, R. P. 1985. *Basic Content Analysis.* Sage Publication.

Weetman, P. 2006. *Financial Accounting.* Pearson Education Limited.

Weirich, T. R. & Harrast, S. 2010. 'Improving Financial Reporting With Interactive Data.' *The Journal of Corporate Accounting & Finance*, 21:2, 61-69.

Weygandt, J. J., Kimmel, P. D., & Kieso, D. 2010. *Financial Accounting.* John Wiley & Sons.

Wooten, M. & Hoffman, A. J. 2008. 'Organizational Fields: Past, Present and Future.' *In R. Greenwood, C. Oliver, R. Suddaby and K. Sahlin (Eds.), The SAGE Handbook of Organizational Institutionalism: 130-147*. London: SAGE publications.

Wright, K., Filatotchev, I., Hoskisson, R. E. & Peng, M. W. 2005 'Strategy Research in Emerging Economies: Challenging the Conventional Wisdom' *Journal of Management Studies*, 42:1, 1-33.

Wu, J., & Vasarhelyi, M. 2004. 'XBRL: A New Tool for Electronic Financial Reporting.' In M. Anandarajan, Anadarajan, A., & Srinivasan, C. A. (Ed.) *Business Intelligence Techniques: A Perspective from Accounting and Finance*. New York: Springer-Verlag.

Wu, J. & Vasarhelyi, M. 2004. 'XBRL: a new tool for electronic financial reporting.' *Business Intelligence Techniques: A Perspective from Accounting and Finance,* 73-92.

Xiao, J. Z., Jones, M. J., & Lymer, A. 2005. 'A Conceptual Framework for Investigating the Impact of the Internet on Corporate Financial Reporting.' *The International Journal of Digital Accounting Research,* 5:10, 131-69.

Xiao, J. Z., Yang, H. & Chow, C. W. 2004. 'The Determinants and Characteristics of Voluntary Internet-Based Disclosures by Listed Chinese Companies.' *Journal of Accounting and Public Policy*, 23:3, 191-225.

Xiao, Z., Jones, M. J., & Lymer, A. 2002. 'Immediate Trends in Internet Reporting.' *European Accounting Review*, 11:2, 245-75.

Xiao, Z. Z., Dyson, J. R. & Powell, P. L. 1996. 'The Impact of Information Technology on Corporate financial Reporting: a Contingency Perspective.' *British Accounting Review*, 28:3, 203-27.

Yazdifar, H. 2004. 'Insight into the Dynamics of Management Accounting Systems Implementation in Group (Dependent) Organizations: An Institutional Perspective.' Unpublished PhD thesis, University of Manchester, Manchester.

Ziolkowski, R. 2005. 'A Re-Examination of Corporate Governance Concepts, Models, Theories, and Future Diretions.' Unpublished PhD thesis, University of Canberra, Bruce, Canberra, Australian Capital Territory.

Zucker, L. G. 1987. 'Institutional theories of organization.' *Annual review of sociology,* 13, 443-64.

Appendices

Appendix 3.1: Timeline for XBRL History and Development

Time	Achievements
02/1998	XML 1.0 was released.
04/1998	Charles Hoffman began to investigate the possible use of XML for financial reporting.
06/1999	Business plan for XFRML was created with the support of AICPA [American Institute of Certified Public Accountants]. Later (in 2000) XFRML changed its name to XBRL.
09/1999	The first official XFRML meeting. Thirteen original companies met with the AICPA at its New York headquarters.
07/2000	XBRL specification 1.0 was released and a taxonomy (a list of terms and associated computer code) defining 1,880 concepts for financial reporting of commercial and industrial companies under U.S. GAAP; the official name became the XBRL Steering committee.
02/2001	Morgan Stanley became the 1st company to tag its financial information in XBRL.
06/2001	XBRL for general ledger (GL) taxonomy was released.
During 2001	Many jurisdictions were formed: XBRL Australia, XBRL Canada, XBRL Germany, XBRL IASB, XBRL Japan, XBRL Netherlands, XBRL UK, and XBRL US.
12/2001	XBRL specification 2.0 was released.
03/2002	Microsoft became the 1st technology company to report its financial data in XBRL.
06/2002	The FDIC [Federal Deposit Insurance Corporation] issued a request included using of XBRL to improve the speed and accuracy of call reports from more than 8,200 banks.
07/2002	Microsoft, PWC and NASDAQ launched the XBRL pilot project.
04/2003	XBRL international steering committee grows to 170 members.
12/2003	XBRL specification 2.1 was released.
During 2004	There were significant XBRL projects all across Asia. China was the first capital market to adopt XBRL as its data standard. Stock exchanges in Japan, Singapore, and South Korea quickly followed. In addition, innovation was shifting to Europe to build taxonomy for financial reporting under IFRS [International Financial Reporting Standards].
11/2004	The 10th XBRL International conference in Brussels included approximately 500 people who came to see what the excitement was all about at XBRL.
Spring 2005	The 11th XBRL International conference in Boston in the spring of 2005.
10/2005	The FDIC system went live and was, by all measures, an astounding success.
09/2006	More foundations were been announced by the SEC [Securities and Exchange Commission] to upgrade XBRL US.

04/2008	XBRL US published the complete taxonomy for U.S. GAAP. The U.S. taxonomies include more than 12,400 XBRL tags and definitions for the standard accounting terms used in U.S. GAAP.
05/2008	The SEC announced its proposed rule requiring public companies to file XBRL data.
06/2008	The SEC announced an additional proposed rule requiring XBRL reporting of mutual fund risk/return summaries.
08/2008	The SEC unveiled an entirely new system built from the ground up to use XBRL data.
01/2009	The SEC released its final rules that will require public companies and foreign private issuers to provide financial statements and related disclosures in a format using XBRL.
06/2009	The US companies began filing XBRL reports.

Source: Adapted from Wu and Vasarhelyi, 2004 and updated from Hoffman, 2006; Kernan, 2009; Weirich and Harrast, 2010.

Note: This table shows the historical development of XBRL.

Appendix 3.2: Studies that Examine IFR (Single-Country Studies)

No	Author	Year	Country[88]	Sample	Sample scope	% W.S	% F.I.
1	Petravick and Gillet	1996	USA	150	Fortune 500	69	81
2	Lymer	1997[89]	UK	50	Top companies listed on the UK Stock Exchange	92	52
						92	60
3	Brennan and Hourigan	1998	Ireland	106	91 Public companies listed on Irish Stock Exchange	37	71
					15 Commercial semi-state companies	100	53
4	Craven and Marston	1999	UK	206	largest listed on FT	74	71
5	Petravick	1999	USA	150	Fortune 150 in 1996	33	27
					Fortune 150 in 1998	95	93
				86	86 listed on NASDAQ in 1998	62	52
6	Ashbaugh et al.	1999	USA	290	Non-financial	87	70
7	Gowthorpe and Amat	1999	Spain	379	Listed on Madrid Stock Exchange	19	49
8	Hedlin	1999	Sweden	60	20 most traded co.	100	95
					20 small and medium-sized co.	95	80
					20 high-techs and newly started co.	100	75
9	FASB	2000	USA	100	Fortune 100 U.S. co.	99	93
10	Breenan and Kelly	2000	Ireland	99	Listed on Irish Stock Exchange	67	72
11	Claus Holm	2000	Denmark.	231	listed on the Copenhagen Stock Exchange	77	72
12	Larrán and Giner	2002	Spain	144	Listed on Madrid Stock Exchange	74	58
13	Lybaert	2002	Netherlands	188	Listed on Amsterdam Stock Exchange	86	94
14	Marston	2003	Japan	99	Top Japanese co.	92	69
15	Haasbroek and Toit	2003	South Africa	100	Top 100 South African companies, ranked according to sales on the Business Times	87	61
16	Rodrigues and Menezes	2003	Portugal	82 in 2000	Listed[90] on Lisbon and Porto Stock Exchange	61	70
				74 in 2001		78	66
17	Oyelere et al.	2003	New Zealand	229	Listed on New Zealand Stock Exc.	54	73
18	Xiao et al.	2004	China	300	Largest companies	68	71
19	Marston and Polei	2004	German	100	DAX 100	100	99

88. The researcher itemised only the studies that were undertaken in five countries or less.
89. The survey was performed during the end of January and early February 1997and was repeated in June 1997.
90. The companies were listed on the Continuous Market and the Second Market.

20	Gowthorpe	2004	UK	314 in 2000	Small listed companies	74	66
				256 in 2001		83	79
21	Barac	2004	South Africa	94	Largest companies	87	86
22	Davey and Homkajohn	2004	Thailand	40	Listed on Thai Stock Exchange	93	81
23	Lodhia et al.	2004	Australia	50	The top 50	100	100
24	Abdul Hamid	2005	Malaysia	100	Listed on Kuala Lumpur Stock Exc.	74	95
25	Trabelsi and Labelle	2006	Canada	118	Listed on Toronto Stock Exchange	96	91
26	Chan and Wickramasighe	2006	Australia	69	35 largest companies and 34 smallest companies from Top 500 listed companies	83	82
27	Dutta and Bose	2007	Bangladesh	268	Listed on Dhaka Stock Exchange	39	62
28	Budisuelyo and Almilia	2008	Indonesia	23	Bank sector	83	68
29	Despina and Demetrios	2009	Greece	302	Listed on Athens Stock Exchange	100	100
30	Salawu	2009	Nigeria	220	Listed on Nigeria Stock Exchange	54	14
31	Almilia	2009	Indonesia	54	19 banks	83	100
					35 co. from LQ-45	100	100
32	Pervan	2009	Croatia	55	Companies whose shares were actively traded in 2005	93	33
33	Hindi and Rich	2010	USA	100	Fortune 100 in 2003	100	75
					Fortune 100 in 2006	100	80
					Fortune 100 in 2009	100	97
34	Lamani and Çepani	2011	Albania.	26	Banks and Insurance companies	92	83

Note: This table shows previous studies that were conducted in single-country and examined IFR. %W.S= percentage of companies with web sites; %F.I= percentage of companies with web sites and disseminate financial information.

Appendix 3.3: Studies that Examine IFR (Multi-Country Studies) Excluding Arab MENA Countries' Studies

No	Author	Year	Country[91]	Sample	Sample scope	% W.S	% F.I.
1	Lymer et al.	1999	22 countries	660	The largest 30 companies listed on each single country	84	62
2	Pirchegger and Wagenhofer	1999	Austria	91	31 Listed on the Vienna S.E. in 1997	71	91
			Austria		31 Listed on the Vienna S.E. in 1998	88	96
			German		Largest in 30 DAX	100	97
3	Deller et al.	1999	USA	300	S&P 100	95	91
			UK		FTSE 100	85	72
			German		DAX 100	76	71
4	Allam and Lymer	2003	USA, UK, Canada, Australia, and China	250	The largest 50 companies listed on each single country	99	100
5	Geerings et al.	2003	Belgium	150	The largest 50 companies listed on each single country	70	92
			France			94	96
			Netherlands			92	96
6	Khadaroo	2005	Malaysia	145	KLSE indexed 100	75	56
			Singapore		STI 45	39	67
7	Bollen et al.	2006	Australia	270	40 largest listed on Australian S.E.	99	91
			Belgium		Bel20 and the following largest 30		
			France		CAC40 and the next 1argest 10		
			Netherland		AEX25 & Midkap25		
			South Africa		40 largest listed on Johannesburg S.E.		
			UK		40 largest were selected from FTSE100		
8	Chatterjee and Hawkes	2008	New Zealand	30	The top companies by market capitalisation of the two countries.	100	43
			India	30		97	28
9	Shukla and Gekara	2010	India	1000	Fortune 500 in Bombay S.E.	80	98
			China		Fortune 500 in Hong Kong S.E.	80	99

Note: This table shows different studies that were conducted across-country and examined the IFR. %W.S= percentage of companies with web sites; %F.I= percentage of companies with web sites and disseminate financial information.

91. The researcher itemised only the studies that were undertaken in five countries or less.

Appendix 3.4: Previous Studies that Examine the Effect of Company Size on IFR

No	Author	Year	Country[92]	Sample size	Criterion	Result
1	Craven and Marston	1999	UK	206	Turnover	+*
					Number of employees	+**
					Total assets	+*
					Market capitalisation	+**
2	Pirchegger and Wagenhofer	1999	Austria	20 in 1997	Annual sales	+*
				26 in 1998	Annual sales	+**
			German	29	Annual sales	+
3	Ashbaugh et al.	1999	USA	290	Total assets	+**
4	Brennan and Hourigan	1999	Ireland	109	Market capitalisation, turnover, and number of employees	+**
5	Ettredge et al.	2002	USA	193	Market capitalisation	+**
6	Larrán and Giner	2002	Spain	144	Market capitalisation	+**
7	Debreceny et al.	2002	22 countries	660	Market capitalisation	+**
8	Ismail	2002	Qatar	24	Total assets	No
			Bahrain	36		
			Saudi	68	Turnover	+*
9	Bonsón and Escobar	2002	The 15 European Union countries in 2001	300	Market capitalisation	+**
10	Allam and Lymer	2003	USA, UK, Canada, Australia, and Hong Kong	250	Market capitalisation	No
11	Marston	2003	Japan	99	Capital employed and turnover for companies with web sites	+**
					Capital employed and turnover for companies with financial information	No
12	Oyelere et al.	2003	New Zealand	229	Market capitalisation Total assets	+**
13	Geerings et al.	2003	Belgium	150	Market capitalisation	associated
			France			
			Netherlands			
14	Rodrigues and Menezes	2003	Portugal	82 in 2000	Turnover	+** with web and +* with IFR

92. The researcher itemised only the studies that were undertaken in five countries or less.

					Number of employees	+ with web and +* with IFR
					Total assets	+** for both with web and with IFR
					Market capitalisation	+ with web and +** with IFR
				74 in 2001	Turnover	+* with web but not with IFR
					Number of employees	No for both
					Total assets	+* for both with web and IFR
					Market capitalisation	+** with web and +* with IFR
15	Joshi and Al-Modhaki	2003	Kuwait and Bahrain	75	Total assets	+*
16	Xiao et al.	2004	China	300	Market capitalisation	+**
17	Marston and Polei	2004	German	50 in 2000 44 in 2003	Market capitalisation	+**
18	Mendes-da-Silva and Christensen	2004	Brazil	291	Total assets	+**
19	Hadi	2005	Kuwait	17 selective industrial companies	Sales	-*
20	Bollen et al.	2006	6 countries	270	Market capitalisation	+**
21	Prabowo	2006	Indonesia	48 Manufa-cturing co.	Total assets	+**
22	Celik et al.	2006	Turkey	253	Market capitalisation	+**
23	Bonsón and Escobar	2006	13 countries of Eastern Europe	266	Market capitalisation	+**
24	Barako et al.	2006	Kenyan	54	Total assets	+**
25	Chan and Wickramasinghe	2006	Australia	69	Market capitalisation	+**
26	Pervan	2006	Croatia	55	Market capitalisation	No
					Earnings	+*
					Total assets	No

			Slovenia	30	Market capitalisation Earnings Total assets	No
27	Momany and Al-Shorman	2006	Jordan	60	Total assets	associated
28	Andrikopoulos and Diakidis	2007	Cyprus	140	Annual sales	+*
29	Al-Shammari	2007	Kuwait	143	Market capitalisation, book value of total debt, and total assets	+**
30	Barako et al.	2008	Indonesia	343	Total assets	+**
31	Al-Motrafi	2008	Saudi	113	Total assets	+**
32	Almilia	2009	Indonesia	19 banks and 35 co. from LQ-45	Total assets	+**
33	Despina and Demetrios	2009	Greece	302	Medium and small capitalisation vs. big capitalisation	associated
34	Alanezi	2009	Kuwait	179	Total assets	+**
35	Al-Moghaiwli	2009	Qatar	39	Total assets	+**
36	Alarussi et al.	2009	Malaysia	189 Malaysian listed companies	Total assets	+**
37	Fekete et al.	2009	Romania	48	Total assets Total sales	No +**
38	Desoky and Mousa	2009	Bahrain	40	Market capitalisation	+**
39	Aly et al.	2010	Egypt	62	Total assets	No
40	Oyelere and Kuruppr	2010	U.A.E	132	Market capitalisation Total assets	+**
41	Elsayed	2010	Egypt	343	Market capitalisation	+**
42	Homayoun and Abdul Rahman	2010	Malaysia	Top 100	Total assets Total sales	No
43	Agboola and Salawu	2012	Nigeria	77	Total sales	+**
44	Agyei-Mensah	2012	Ghana	All listed companies	Total sales	No
45	Alali and Romero	2012	Argentina	84 publicly traded firms listed on the Buenos Aires Stock Exchange	Total assets	+**
46	Boubaker et al.	2012	France	529 companies listed on 2005	Total assets	+**
47	AbuGhazaleh et al.	2012	Jordan	187 Jordanian listed companies	Market capitalisation	+**

48	Turrent and Ariza	2012	Spain and Mexico	70	Total number of employees	No
49	Uyar	2012	Turkey	44	Total of assets	+**
50	Momany and Pillai	2012	UAE	65	Market capitalisation	+
51	Hossain et al.	2012	Qatar	42	Total assets	+*

Note: This table shows previous studies that have examine the relationship between a company size and the level of IFR. *= significant relationship at 5%; **= significant relationship at 1%; += significant relationship at 10%; No= no relationship; associated= the level of significance was not mentioned.

Appendix 3.5: Previous Studies that Examine the Effect of Profitability on IFR

No	Author	Year	Country[93]	Sample size	Criterion	Result
1	Ashbaugh et al.	1999	USA	290	ROA	No
2	Ettredge et al.	2002	USA	193	Annual returns	No
3	Larrán and Giner	2002	Spain	144	ROE	No
4	Ismail	2002	Qatar	24	ROA	No
			Bahrain	36		
			Saudi	68	ROE	+*
5	Marston	2003	Japan	99	Pre-tax profit and pre-tax profit divided by capital employed	No
6	Oyelere et al.	2003	New Zealand	229	ROE and ROA	No
7	Joshi and Al-Modhaki	2003	Kuwait and Bahrain	75	ROA	No
8	Xiao et al.	2004	China	300	ROA	-
9	Marston and Polei	2004	German	50 in 2000	ROE	No
				44 in 2003		
10	Mendes-da-Silva and Christensen	2004	Brazil	291	ROA	No
11	Hadi	2005	Kuwait	17 selective industrial companies	Net income	+*
12	Bollen et al.	2006	6 countries	270 in 2000 and 2001	ROE and EPS	No
13	Prabowo	2006	Indonesia	48 Manufa-cturing co.	ROA	+*
14	Celik et al.	2006	Turkey	253	ROE	+
15	Pervan	2006	Croatia	55	ROA	No
					ROE	No
					ROS	+*
			Slovenia	30	ROA	No
					ROE	
					ROS	
16	Momany and Al-Shorman	2006	Jordan	60	ROA	No
17	Chan and Wickramasinghe	2006	Australia	69	Earnings before interest and tax over total assets	No
18	Barako et al.	2006	Kenyan	54	ROE	No
19	Andrikopoulos and Diakidis	2007	Cyprus	140	Net income	No
20	Al-Shammari	2007	Kuwait	143	ROE	No
21	Barako et al.	2008	Indonesia	343	ROA	No
22	Al-Motrafi	2008	Saudi Arabia	113	ROA	No

93. The researcher itemised only the studies that were undertaken in five countries or less.

23	Al-Moghaiwli	2009	Qatar	39	ROA	+**
24	Alanezi	2009	Kuwait	179	ROE and ROA	No
25	Fekete et al.	2009	Romania	48	ROE	+*
26	Alarussi et al.	2009	Malaysia	189 Malaysian listed companies	EPS	No
27	Almilia	2009	Indonesia	19 banks and 35 co. from LQ-45	ROA	No
					ROE	+
28	Desoky and Mousa	2009	Bahrain	40	ROA	No
29	Aly et al.	2010	Egypt	62	ROE	+**
30	Oyelere and Kuruppr	2010	U.A.E	132	ROE	-
					ROA	No
31	Elsayed	2010	Egypt	343	ROE	No
32	Homayoun and Abdul Rahman	2010	Malaysia	Top 100	ROA	No
					ROE	+**
33	Agboola and Salawu	2012	Nigeria	77	ROA	No
34	Agyei-Mensah	2012	Ghana	All listed companies	ROA	+*
35	Alali and Romero	2012	Argentina	84 publicly traded firms listed on the Buenos Aires Stock Exchange	ROA	No
36	Boubaker et al.	2012	France	529 companies listed on 2005	ROA	No
37	Momany and Pillai	2012	UAE	65	ROA	-**
					EPS	+**
38	Hossain et al.	2012	Qatar	42	ROE	No

Note: This table shows previous studies that have examined the relationship between profitability and the level of IFR. *= significant relationship at 5%; **= significant relationship at 1%; +/-= significant relationship at 10%; No= no relationship; ROA= return on assets; ROE= return on equity; ROS= return on sales; EPS= earnings per share.

Appendix 3.6: Previous Studies that Examine the Effect of Leverage on IFR

No	Author	Year	Country[94]	Sample size	Criterion	Result
1	Brennan and Hourigan	1999	Ireland	109	Total debt to equity ratio	No
2	Larrán and Giner	2002	Spain	144	Total debt to equity ratio	No
3	Debreceny et al.	2002	22 countries	660	Long term debt to equity ratio	No
4	Ismail	2002	Qatar	24	Long term debt to equity ratio	+
			Bahrain	36		
			Saudi	68		
5	Oyelere et al.	2003	New Zealand	229	Total debt to equity ratio	No
6	Joshi and Al-Modhaki	2003	Kuwait and Bahrain	75	Long term debt to equity ratio	+
7	Xiao et al.	2004	China	300	Total debt to total assets	No
8	Mendes-da-Silva and Christensen	2004	Brazil	291	Total debt to equity ratio	No
9	Bollen et al.	2006	6 countries	270	Total debt to equity ratio	No
10	Prabowo	2006	Indonesia	48 Manufactur-ing co.	Long term debt to total assets	+*
11	Momany and Al-Shorman	2006	Jordan	60	Total debt to equity ratio	+
12	Celik et al.	2006	Turkey	253	Not clear	No
13	Chan and Wickramasinghe	2006	Australia	69	Total debt to equity ratio	No
14	Barako et al.	2006	Kenyan	54	Total debt to total assets	+**
15	Andrikopoulos and Diakidis	2007	Cyprus	140	Total debt to equity ratio	No
16	Al-Shammari	2007	Kuwait	143	Total debt to equity ratio	No
17	Barako et al.	2008	Indonesia	343	Total debt to total assets	No
18	Alanezi	2009	Kuwait	179	Total debt to equity ratio	No
19	Fekete et al.	2009	Romania	48	Total debt to equity ratio	-*
20	Almilia	2009	Indonesia	19 banks and 35 co. from LQ-45	Total debt to total assets	No
21	Alarussi et al.	2009	Malaysia	189	Total debt to total assets	No
22	Aly et al.	2010	Egypt	62	Total debt to total assets	No
23	Oyelere and Kuruppr	2010	U.A.E	132	Total debt to equity ratio	+**
24	Elsayed	2010	Egypt	343	Total debt to total assets	+**
25	Homayoun and Abdul Rahman	2010	Malaysia	Top 100	Total debt to total assets Long term debt to equity ratio	No

94. The researcher itemised only the studies that were undertaken in five countries or less.

26	Alarussi et al.	2011	Malaysia	194	Long term debt to total assets	No
27	Agboola and Salawu	2012	Nigeria	77	Total debt to total assets	No
28	Agyei-Mensah	2012	Ghana	All listed companies	Total debt to total assets	-*
29	Alali and Romero	2012	Argentina	84 publicly traded listed firms	Total debt to total assets	No
30	Boubaker et al.	2012	France	529 companies listed on 2005	Book value of non-equity liabilities/book value of total assets	No
31	Turrent and Ariza	2012	Spain and Mexico	70	Total debt to total assets	No
32	Momany and Pillai	2012	UAE	65	Total debt to total assets	+

Note: This table shows previous studies that have examined the relationship between leverage and the level of IFR. *= significant relationship at 5%; **= significant relationship at 1%; += significant at 10%; No= no relationship; associated= the level of significance was not mentioned.

Appendix 3.7: Previous Studies that Examine the Effect of Industrial Sector on IFR

No	Author	Year	Country[95]	Sample size	Criterion	Result
1	Ashbaugh et al.	1999	USA	290	7 Sectors	No
2	Craven and Marston	1999	UK	206	6 Sectors	No
3	Brennan and Hourigan	1999	Ireland	109	6 Sectors	+**
4	Larrán and Giner	2002	Spain	144	3 Groups	No
5	Bonsón and Escobar	2002	The 15 European Union countries in 2001	300	11 Groups	+**
6	Debreceny et al.	2002	22 countries	660	10 Sectors	+*
7	Ismail	2002	Qatar	24	4 Sectors	+**
			Bahrain	36		
			Saudi	68		
8	Marston	2003	Japan	99	4 Sectors	+** companies with web sites
						Not sig. for companies with fin. Info.
9	Oyelere et al.	2003	New Zealand	229	6 Sectors	+*
10	Joshi and Al-Modhaki	2003	Kuwait and Bahrain	75	6 Sectors	+*
11	Geerings et al.	2003	Belgium	150	2 Sectors	No
			France			
			Netherlands			
12	Rodrigues and Menezes	2003	Portugal	82 in 2000	13 Sectors	No
				74 in 2001	13 Sectors	No
13	Xiao et al.	2004	China	300	IT sector and other sectors	+*
14	Bollen et al.	2006	6 countries	270 in 2000 and 2001	Services and telecommunications sectors vs. other sectors	No
15	Bonsón and Escobar	2006	13 countries of Eastern Euorpe	266	11 sectors	+**
16	Celik et al.	2006	Turkey	253	3 Sectors	+**
17	Pervan	2006	Croatia	55	7 Sectors	+*
			Slovenia	30	7 Sectors	No
18	Momany and Al-Shorman	2006	Jordan	60	3 Sectors	No

95. The researcher itemised only the studies that were undertaken in five countries or less.

19	Chan and Wickramasinghe	2006	Australia	69	4 Sectors	No
20	Barako et al.	2006	Kenyan	54	4 Sectors	+**
21	Al-Shammari	2007	Kuwait	143	7 Sectors	+*
22	Al-Motrafi	2008	Saudi	113	5 sectors	No
23	Despina and Demetrios	2009	Greece	302	18 Sectors	No
24	Alanezi	2009	Kuwait	179	7 Sectors	+**
25	Fekete et al.	2009	Romania	48	4 Sectors not included financial sector	No
26	Desoky and Mousa	2009	Bahrain	40	6 Sectors	No
27	Aly et al.	2010	Egypt	62	9 Sectors	+**
28	Oyelere and Kuruppr	2010	U.A.E	132	7 Sectors	No
29	Elsayed	2010	Egypt	343	Financial sector vs. the other sectors	+**
30	Homayoun and Abdul Rahman	2010	Malaysia	Top 100	9 Sectors	No
31	Alali and Romero	2012	Argentina	84 publicly traded listed firms	8 Sectors	+**
32	Boubaker et al.	2012	France	529 companies listed on 2005	The information technology industry and other sectors	+**
33	Turrent and Ariza	2012	Spain and Mexico	70	6 Sectors	No
34	Uyar	2012	Turkey	44	4 Sectors	No

Note: This table shows previous studies that have examined the relationship between industrial sector and the level IFR.
*= significant relationship at 5%; **= significant relationship at 1%; No= no relationship.

Appendix 3.8: Previous Studies that Examine the Effect of the Type of Auditor

No	Author	Year	Country[96]	Sample size	Criterion	Result
1	Joshi and Al-Modhaki	2003	Kuwait and Bahrain	75	Big-4 versus non big-4	No
2	Xiao et al.	2004	China	300	Big-5 versus non-big-5	+
3	Chan and Wickramasinghe	2006	Australia	69	Big-5 versus non-big-5	No
4	Bonsón and Escobar	2006	13 countries of Eastern Euorpe	266	Big-4 versus non-big-4	+**
5	Al-Shammari	2007	Kuwait	143	Big-4 versus non-big-4	+*
6	Al-Motrafi	2008	Saudi Arabia	113	Big-4 versus non-big-4	No
7	Alanezi	2009	Kuwait	179	Big-4 versus non-big-4	+*
8	Fekete et al.	2009	Romania	48	Big-4 versus non-big-4	No
9	Aly et al.	2010	Egypt	62	Big-4 versus non-big-4	No
10	Elsayed	2010	Egypt	343	Big-4 versus non-big-4	+
11	Agboola and Salawu	2012	Nigeria	77	Big-4 versus non-big-4	+*
12	Agyei-Mensah	2012	Ghana	All listed companies	Big-4 versus non-big-4	No
13	Alali and Romero	2012	Argentina	84 publicly traded listed firms	Big-4 versus non-big-4	No
14	Boubaker et al.	2012	France	529 companies listed on 2005	Big-4 versus non-big-4	+**
15	Momany and Pillai	2012	UAE	65	Big-4 versus non-big-4	+

Note: This table shows previous studies that have examined the relationship between type of auditor and the level of IFR. *= significant relationship at 5%; **= significant relationship at 1%; += significant relationship at 10%; No= no relationship.

96. The researcher itemised only the studies that were undertaken in five countries or less.

Appendix 3.9: Previous Studies that Examine the Effect of Country on IFR

No	Author	Year	Country[97]	Sample size	Criterion	Result
1	Bonsón and Escobar	2002	The 15 European Union countries in 2001	300	Country with high disclosure vs. country with low disclosure.	+**
2	Debreceny et al.	2002	22 countries	660	Countries were classified into 6 groups	+**
3	Ismail	2002	Qatar	24	Qatar and Bahrain vs. Saudi Arabia.	+*
			Bahrain	36		
			Saudi	68		
4	Joshi and Al-Modhaki	2003	Kuwait	42	Dummy variable	No
			Bahrain	33		
5	Allam and Lymer	2003	USA	250	Not clear	+**
			UK			
			Canada			
			Australia			
			Hong Kong			
6	Geerings et al.	2003	Belgium	150	Differences in the level of IFR among the three countries	Associated
			France			
			Netherlands			
7	Bollen et al.	2006	6 countries	270 in 2000 and 2001	1 for lowest level of national disclosure environment to 3 for highest level of national disclosure environment	+**
8	Bonsón and Escobar	2006	13 countries of Eastern Euorpe	266	Thirteen dichotomous variable	No

Note: This table shows previous studies that have examined the effect of country on the level of IFR. *= significant relationship at 5%; **= significant relationship at 1%; associated= the level of significance was not mentioned

97. The researcher itemised only the studies that were undertaken in five countries or less.

Appendix 7.1: Descriptive Statistics- Panel A: Bahrain

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	39,381	28,105,001	3,021,193	6,515,378	3.131	9.556
		N-IFRC	13,349	98,652	43,976	27,486	1.439	2.751
		N-WEBC	13,349	54,873	34,864	14,459	-0.223	-0.019
	MC USD,000	IFRC	40,804	3,780,924	644,281	986,302	2.219	4.303
		N-IFRC	8,785	109,580	34,494	34,265	2.282	5.586
		N-WEBC	8,785	33,089	21,980	9,666	-0.179	-1.796
Profitability	ROA %	IFRC	-88.57	17.236	0.840	17.262	-4.130	20.263
		N-IFRC	-0.116	11.882	7.138	4.200	-.890	-.003
		N-WEBC	-0.116	10.193	6.347	3.989	-0.933	-0.264
	ROE %	IFRC	-127.150	21.038	1.814	27.529	-3.423	13.517
		N-IFRC	-0.125	16.144	8.781	5.465	-0.455	-0.210
		N-WEBC	-0.125	16.144	8.108	5.661	-0.098	-0.075
Leverage	%	IFRC	0.000	4.870	1.102	1.314	1.552	1.524
		N-IFRC	0.000	0.410	0.129	0.150	1.356	1.174
		N-WEBC	0.000	0.410	0.136	0.162	1.151	0.293

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	33	0	2	35	45
	No Big-4	5	1	4	10	
Industrial	Financial	27	0	0	27	45
	Services	9	1	3	13	
	Real Estate	1	0	0	1	
	Industrial	1	0	3	4	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel B: Egypt

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	12,107	12,973,280	1,463,114	2,751,367	2.622	6.344
		N-IFRC	6,263	2,158,412	197,715	341,225	3.852	18.552
		N-WEBC	4,207	2,740,657	391,919	787,948	2.481	5.007
	MC USD,000	IFRC	7,058	10,297,028	750,412	1,511,518	4.097	20.971
		N-IFRC	10,202	2,646,562	201,790	428,842	4.212	20.172
		N-WEBC	7,937	2,658,840	308,486	625,307	3.028	9.226
Profitability	ROA %	IFRC	-19.670	32.970	5.564	8.908	0.656	2.527
		N-IFRC	-27.090	30.480	7.870	8.627	-0.317	4.194
		N-WEBC	-3.800	33.540	10.310	9.068	0.951	0.672
	ROE %	IFRC	-139.74	43.260	7.80288	25.99	-3.488	15.838
		N-IFRC	-57.430	40.770	12.964	14.209	-1.666	9.282
		N-WEBC	-4.780	47.190	17.597	14.223	0.722	-0.246
Leverage	%	IFRC	0.000	2.71	0.477	0.603	1.65	2.632
		N-IFRC	0.000	1.180	0.235	0.316	1.591	1.846
		N-WEBC	0.000	2.080	0.196	0.480	3.104	10.174

Categorical Variables						
Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	36	17	6	59	167
	No Big-4	45	44	19	108	
Industrial	Financial	20	7	2	29	167
	Services	13	11	5	29	
	Real Estate	9	9	2	20	
	Industrial	39	34	16	89	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel C: Kuwait

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	29,457	45,903,730	2,342,696	6,812,196	5.107	28.740
		N-IFRC	21,715	2,125,949	262,022	363,764	3.552	14.883
		N-WEBC	12,135	679,228	174,971	200,808	1.501	1.290
	MC USD,000	IFRC	18,757	20,943,093	951,324	2,884,193	5.581	33.683
		N-IFRC	13,906	1,467,533	133,110	198,276	4.920	30.826
		N-WEBC	5,325	488,195	90,584	113,786	2.205	4.937
Profitability	ROA %	IFRC	-59.660	28.650	-0.518	10.355	-2.375	11.002
		N-IFRC	-93.130	19.670	-3.598	15.320	-3.370	17.308
		N-WEBC	-178.7	26.09	-9.26679	36.13302194	-4.085	19.119
	ROE %	IFRC	-92.220	170.990	-0.468	25.863	1.763	18.918
		N-IFRC	-240.430	27.990	-9.796	38.422	-3.876	19.747
		N-WEBC	-130.490	29.220	-9.685	30.038	-2.606	9.175
Leverage	%	IFRC	-3.711	6.564	0.860	1.229	2.127	10.728
		N-IFRC	-1.261	5.863	0.838	1.318	2.340	5.773
		N-WEBC	0.000	7.165	0.650	1.440	3.800	16.269

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	68	28	8	104	205
	No Big-4	41	40	20	101	
Industrial	Financial	42	18	4	64	205
	Services	26	26	10	62	
	Real Estate	25	12	7	44	
	Industrial	16	12	7	35	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel D: Libya

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	274,084	21,770,771	10,474,851	10,790,107	0.452	.
		N-IFRC	26,557	5,880,035	1,242,286	2,146,946	2.199	4.936
		N-WEBC	N/A	N/A	N/A	N/A	N/A	N/A
	MC USD,000	IFRC	54,714	965,869	516,858	455,719	-0.130	.
		N-IFRC	12,442	651,304	175,195	245,675	1.616	1.647
		N-WEBC	N/A	N/A	N/A	N/A	N/A	N/A
Profitability	ROA %	IFRC	0.634	2.768	1.394	1.192	1.703	.
		N-IFRC	0.476	6.497	3.494	2.742	0.197	-2.519
		N-WEBC	N/A	N/A	N/A	N/A	N/A	N/A
	ROE %	IFRC	9.838	13.921	12.519	2.323	-1.727	.
		N-IFRC	2.121	18.835	10.922	6.063	-0.085	-1.329
		N-WEBC	N/A	N/A	N/A	N/A	N/A	N/A
Leverage	%	IFRC	2.555	20.970	13.405	9.637	-1.356	.
		N-IFRC	0.004	18.747	5.829	7.553	1.169	-0.300
		N-WEBC	N/A	N/A	N/A	N/A	N/A	N/A

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	0	0	N/A	0	10
	No Big-4	3	7	N/A	10	
Industrial	Financial	3	6	N/A	9	10
	Services	0	0	N/A	0	
	Real Estate	0	0	N/A	0	
	Industrial	0	1	N/A	1	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel E: Morocco

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	13,216	36,628,682	3,355,144	7,788,366	3.271	10.619
		N-IFRC	10,685	2,510,756	380,892	617,571	2.492	6.410
		N-WEBC	5,578	169,492	55,629	45,066	1.705	3.837
	MC USD,000	IFRC	9,032	15,781,895	1,554,579	2,965,581	3.590	14.787
		N-IFRC	6,209	3,921,791	367,722	842,464	3.943	16.680
		N-WEBC	7,941	203,755	66,325	60,935	1.384	1.407
Profitability	ROA %	IFRC	-0.426	29.890	7.025	6.741	1.484	2.390
		N-IFRC	-10.584	17.760	4.300	6.474	-0.191	0.530
		N-WEBC	-4.504	18.354	8.821	7.537	-0.512	-1.057
	ROE %	IFRC	-0.871	52.095	18.448	10.789	1.387	2.881
		N-IFRC	-47.827	34.773	7.403	19.383	-1.640	2.697
		N-WEBC	-23.982	51.793	14.775	19.370	-0.228	1.545
Leverage	%	IFRC	0.000	5.171	0.984	1.079	1.922	4.859
		N-IFRC	0.000	9.740	0.893	2.089	3.973	16.987
		N-WEBC	0.000	3.184	0.723	1.147	1.697	1.610

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	28	12	8	48	71
	No Big-4	10	10	3	23	
Industrial	Financial	10	6	2	18	71
	Services	6	5	0	11	
	Real Estate	2	1	1	4	
	Industrial	20	10	8	38	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel F: Oman

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	1,894	15,168,899	736,005	2,073,552	5.677	37.600
		N-IFRC	4,666	210,724	40,966	44306.747	2.068	5.319
		N-WEBC	4,124	371,645	58,032	98,612	2.869	8.815
	MC USD,000	IFRC	1,611	3,364,280	287,460	571,414	3.727	15.792
		N-IFRC	1,010	144,122	28,078	33949.077	2.108	4.116
		N-WEBC	234	154,296	30,868	41,801	2.231	5.687
Profitability	ROA %	IFRC	-25.380	20.500	5.928	7.611	-1.122	3.785
		N-IFRC	-31.650	29.800	5.630	10.878	-0.810	3.289
		N-WEBC	-19.880	24.630	3.646	12.164	-0.003	-0.014
	ROE %	IFRC	-56.130	46.130	12.683	14.824	-1.973	7.839
		N-IFRC	-89.670	600.340	25.267	104.063	5.379	30.667
		N-WEBC	-57.060	53.890	9.213	26.616	-0.673	2.508
Leverage	%	IFRC	0.000	12.325	1.054	1.784	4.559	25.737
		N-IFRC	-10.737	5.609	-0.032	2.779	-2.847	10.523
		N-WEBC	-4.782	2.240	0.429	1.716	-2.239	6.921

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	54	21	7	82	113
	No Big-4	11	13	7	31	
Industrial	Financial	26	5	2	33	113
	Services	15	11	4	30	
	Real Estate	0	0	0	0	
	Industrial	24	18	8	50	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel G: Qatar

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	48,734	61,351,989	6,228,380	11,493,335	3.561	15.248
		N-IFRC	47,664	8,768,025	1,859,498	3,862,791	2.234	4.992
		N-WEBC	92,217	92,217	92,217	.	.	.
	MC USD,000	IFRC	44,195	20,845,935	2,794,992	4,665,578	3.200	10.517
		N-IFRC	30,770	22,219,501	4,518,168	9,895,542	2.236	4.999
		N-WEBC	69,188	69,188	69,188	.	.	.
Profitability	ROA %	IFRC	-8.010	17.910	6.785	5.784	0.201	0.072
		N-IFRC	-1.520	8.780	3.108	4.120	0.465	-1.110
		N-WEBC	4.030	4.030	4.030	.	.	.
	ROE %	IFRC	-8.790	30.900	15.978	8.528	-0.577	0.669
		N-IFRC	-1.670	10.490	4.972	5.395	-0.339	-2.551
		N-WEBC	4.090	4.090	4.090	.	.	.
Leverage	%	IFRC	0.000	7.463	0.848	1.432	3.267	13.002
		N-IFRC	0.000	0.129	0.045	0.060	0.832	-1.983
		N-WEBC	0.000	0.000	0.000	.	.	.

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	35	3	1	39	42
	No Big-4	1	2	0	3	
Industrial	Financial	20	1	1	22	42
	Services	8	1	0	9	
	Real Estate	2	1	0	3	
	Industrial	6	2	0	8	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel H: Saudi Arabia

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	24,304	84,294,562	6,075,430	13,912,473	3.381	12.626
		N-IFRC	20,050	11,395,051	541,626	1,750,617	6.108	38.502
		N-WEBC	15,867	2,369,439	393,538	805,376	2.735	7.582
	MC USD,000	IFRC	86,668	83,801,048	3,452,748	9,700,578	6.608	51.520
		N-IFRC	62,931	8,103,628	537,249	1,281,304	5.411	31.423
		N-WEBC	49,401	1,609,353	300,546	531,871	2.765	7.727
Profitability	ROA %	IFRC	-16.290	38.610	5.248	8.278	1.131	3.506
		N-IFRC	-21.480	24.910	1.190	10.249	-0.170	-0.257
		N-WEBC	-30.210	12.210	-5.084	12.185	-1.037	2.822
	ROE %	IFRC	-66.430	50.240	9.340	15.203	-1.154	6.594
		N-IFRC	-61.040	34.330	-0.407	20.321	-0.766	0.737
		N-WEBC	-53.680	19.200	-7.840	22.020	-1.205	2.634
Leverage	%	IFRC	0.000	3.572	0.530	0.740	2.076	4.683
		N-IFRC	0.000	3.029	0.276	0.553	3.552	15.131
		N-WEBC	0.000	0.039	0.010	0.016	1.431	0.252

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	73	34	2	109	147
	No Big-4	24	8	6	38	
Industrial	Financial	31	14	2	47	147
	Services	12	5	1	18	
	Real Estate	5	3	1	9	
	Industrial	49	20	4	73	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel I: Tunisia

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	25,166	5,191,674	1,421,768	1,629,726	1.003	-0.164
		N-IFRC	12,715	4,777,628	572,881	1,328,875	2.800	7.007
		N-WEBC	7,410	489,715	122,130	147,570	1.756	3.217
	MC USD,000	IFRC	0	899,517	312,107	287,379	0.795	-0.198
		N-IFRC	8,731	333,482	109,859	111,102	0.958	-0.621
		N-WEBC	5,694	543,045	108,996	158,409	2.443	6.335
Profitability	ROA %	IFRC	0.750	9.550	2.688	2.268	1.927	4.022
		N-IFRC	-29.580	20.310	3.541	8.931	-1.756	7.782
		N-WEBC	-13.160	30.470	8.019	12.409	0.415	0.349
	ROE %	IFRC	2.880	21.120	11.666	5.593	0.031	-0.856
		N-IFRC	-360.540	33.270	-3.277	75.013	-4.874	24.132
		N-WEBC	-3.110	34.230	17.242	11.947	-0.312	-0.599
Leverage	%	IFRC	0.000	8.648	1.892	2.100	2.184	5.767
		N-IFRC	0.000	12.596	2.038	3.417	2.475	5.524
		N-WEBC	-1.617	8.852	1.587	3.237	1.677	1.879

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	9	6	4	19	54
	No Big-4	9	19	7	35	
Industrial	Financial	12	5	5	22	54
	Services	1	6	2	9	
	Real Estate	0	2	1	3	
	Industrial	5	12	3	20	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.1: Descriptive Statistics- Panel J: UAE

Variable			Statistics					
			Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Size	TA USD,000	IFRC	25,034	77,925,138	6,386,032	13,570,839	3.345	12.414
		N-IFRC	14,757	3,572,530	326,869	757,916	4.312	19.219
		N-WEBC	5,308	2,287,859	498,708	804,503	2.440	6.149
	MC USD,000	IFRC	2,394	23,139,651	1,272,132	2,921,292	5.934	42.164
		N-IFRC	4,712	412,838	134,812	118,874	1.084	0.153
		N-WEBC	6,104	353,523	178,723	138,577	0.001	-1.967
Profitability	ROA %	IFRC	-28.430	34.310	2.286	7.766	-0.729	7.758
		N-IFRC	-15.990	24.810	2.788	9.414	0.118	0.824
		N-WEBC	-11.220	4.620	0.834	5.467	-2.352	5.806
	ROE %	IFRC	-186.720	300.480	7.562	41.801	3.137	36.819
		N-IFRC	-21.450	36.410	4.524	14.141	-0.017	0.153
		N-WEBC	-39.010	7.770	-2.324	16.331	-2.540	6.591
Leverage	%	IFRC	0.000	8.518	0.851	1.558	3.309	11.997
		N-IFRC	0.000	6.791	0.519	1.459	4.362	19.552
		N-WEBC	0.000	1.615	0.321	0.597	2.235	5.035

Categorical Variables

Variable		IFRC	N-IFRC	N-WEBC	Total	
Auditor	Big-4	75	13	2	90	107
	No Big-4	4	8	5	17	
Industrial	Financial	50	6	1	57	107
	Services	14	1	1	16	
	Real Estate	7	1	1	9	
	Industrial	8	13	4	25	

Note: IFRC = companies with IFR; N-IFRC = companies with a web site but without IFR; and N-WEBC = companies without a web site.

Appendix 7.2: Pearson's Correlation Coefficient of the Independent Variables

	TA	MC	ROA	ROE	LEV
SIZE (TA)	1				
SIZE (MC)	**.695****	1			
PROF (ROA)	-.020	.061	1		
PROF (ROE)	.030	**.066***	**.432****	1	
LEV	**.168****	.019	**-.086****	**-.244****	1

Note: **= Correlation is significant at the 1% level (2-tailed); *= Correlation is significant at the 5% level (2-tailed).

Appendix 7.3- Panel A: Mann-Whitney Test (IFR_2)

Variable		IFR_2	N	Mean Rank	significance
Size	TA	With IFR	564	501.69	**.000****
		No IFR	286	275.69	
	MC	With IFR	559	489.13	**.000****
		No IFR	283	287.91	
Profitability	ROA	With IFR	564	429.31	.471
		No IFR	285	416.47	
	ROE	With IFR	563	441.29	**.005****
		No IFR	285	391.33	
Leverage	LEV	With IFR	562	452.38	**.000****
		No IFR	286	369.72	
Auditor	AUD	With IFR	564	462.71	**.000****
		No IFR	286	352.13	
Industrial Type	IND	With IFR	564	396.28	**.000****
		No IFR	286	483.11	
Country	COU	With IFR	564	433.37	**.185**
		No IFR	286	409.98	
Region	REG	With IFR	564	447.50	**.000****
		No IFR	286	382.11	

Note: **= significant at the 1% level (2-tailed); IFR_2= grouping variable.

Appendix 7.3- Panel B: Mann-Whitney Test (IFR_3)

Variable		IFR_3	N	Mean Rank	significance
Size	TA	With IFR	564	373.42	**.000****
		No IFR	111	158.03	
	MC	With IFR	559	368.83	**.000****
		No IFR	111	167.65	
Profitability	ROA	With IFR	564	336.68	.691
		No IFR	111	344.73	
	ROE	With IFR	563	342.12	.165
		No IFR	111	314.05	
Leverage	LEV	With IFR	562	355.63	**.000****
		No IFR	111	242.68	
Auditor	AUD	With IFR	564	358.44	**.000****
		No IFR	111	234.12	
Industrial Type	IND	With IFR	564	322.29	**.000****
		No IFR	111	417.84	
Country	COU	With IFR	564	346.49	**.010****
		No IFR	111	294.86	
Region	REG	With IFR	564	347.72	**.000****
		No IFR	111	288.59	

Note: **= significant at the 1% level (2-tailed); IFR_3= grouping variable.

Appendix 7.3- Panel C: Mann-Whitney Test (WEB_1)

Variable		WEB_1	N	Mean Rank	significance
Size	TA	With IFR	850	507.94	**.000****
		No IFR	111	274.74	
	MC	With IFR	842	502.51	**.000****
		No IFR	111	283.48	
Profitability	ROA	With IFR	849	478.69	.577
		No IFR	111	494.32	
	ROE	With IFR	848	482.53	.434
		No IFR	111	460.65	
Leverage	LEV	With IFR	848	495.48	**.000****
		No IFR	111	361.75	
Auditor	AUD	With IFR	850	496.59	**.000****
		No IFR	111	361.65	
Industrial Type	IND	With IFR	850	469.07	**.000****
		No IFR	111	572.37	
Country	COU	With IFR	850	488.57	**.018***
		No IFR	111	423.00	
Region	REG	With IFR	850	487.85	**.008****
		No IFR	111	428.55	

Note: **= significant at the 1% level (2-tailed); *= significant at the 5% level (2-tailed); WEB_1= grouping variable.

Appendix 7.3- Panel D: Manny Whitney Test (WEB_2)

Variable		WEB_2	N	Mean Rank	significance
Size	TA	With IFR	286	209.20	**.004****
		No IFR	111	172.71	
	MC	With IFR	283	207.57	**.005****
		No IFR	111	171.83	
Profitability	ROA	With IFR	285	195.74	.441
		No IFR	111	205.59	
	ROE	With IFR	285	196.90	.656
		No IFR	111	202.61	
Leverage	LEV	With IFR	286	208.29	**.009****
		No IFR	111	175.07	
Auditor	AUD	With IFR	286	205.00	.052
		No IFR	111	183.53	
Industrial Type	IND	With IFR	286	194.52	.186
		No IFR	111	210.54	
Country	COU	With IFR	286	204.77	.103
		No IFR	111	184.14	
Region	REG	With IFR	286	200.18	.698
		No IFR	111	195.95	

Note: **= significant at the 1% level (2-tailed); WEB_2= grouping variable.

Appendix 7.4- Panel A: Mann-Whitney Test for Industrial Sector Variable (IFR_2)

	Financial	Services	Real Estate	Industrial
Financial	1			
Services	**.000****			
Real Estate	**.009****	.657		
Industrial	**.000****	.543	.349	

Note: this table shows differences between sectors regarding IFR_2; **= difference is significant at the 1% level.

Appendix 7.4- Panel B: Manny-Whitney Test for Industrial Sector Variable (IFR_3)

	Financial	Services	Real Estate	Industrial
Financial				
Services	**.000****			
Real Estate	**.002****	.959		
Industrial	**.000****	.389	.541	

Note: this table shows differences between sectors regarding IFR_3; **= difference is significant at the 1% level.

Appendix 7.4- Panel C: Mann-Whitney Test for Industrial Sector Variable (WEB_1)

	Financial	Services	Real Estate	Industrial
Financial				
Services	**.003****			
Real Estate	**.009****	.856		
Industrial	**.000****	.476	.725	

Note: this table shows differences between sectors regarding WEB_1; **= difference is significant at the 1% level.

Appendix 7.4- Panel D: Mann-Whitney Test for Industrial Sector Variable (WEB_2)

	Financial	Services	Real Estate	Industrial
Financial				
Services	.345			
Real Estate	.283	.723		
Industrial	.150	.691	.933	

Note: this table shows differences between sectors regarding WEB_2; **= difference is significant at the 1% level.

Appendix 7.5- Panel A: Mann-Whitney Test for Country Variable (IFR_2)

	Bahrain	Egypt	Kuwait	Libya	Morocco	Oman	Qatar	Saudi	Tunisia	UAE
Bahrain										
Egypt	**.000****									
Kuwait	**.000****	.412								
Libya	**.001****	.098	**.048***							
Morocco	**.000****	.407	.810	**.049***						
Oman	**.000****	.179	.502	**.027***	.767					
Qatar	.104	**.000****	**.001****	**.000****	**.007****	**.008****				
Saudi	**.000****	**.027***	.129	**.010****	.372	.502	**.021***			
Tunisia	**.000****	.081	**.019***	.494	**.032***	**.008****	**.000****	**.001****		
UAE	**.008****	**.000****	**.003****	**.001****	**.031***	**.036***	.222	.111	**.000****	

Note: this table shows differences between selected Arab MENA countries regarding IFR_2; **= difference is significant at the 1% level; *= difference is significant at the 5% level.

Appendix 7.5- Panel B: Mann-Whitney Test for Country Variable (IFR_3)

	Bahrain	Egypt	Kuwait	Libya	Morocco	Oman	Qatar	Saudi	Tunisia	UAE
Bahrain										
Egypt	.172									
Kuwait	.316	.557								
Libya	.727	.507	.383							
Morocco	.275	.877	.767	.550						
Oman	.558	.335	.628	.623	.514					
Qatar	.083	**.005****	**.010****	.962	**.009****	**.025***				
Saudi	.252	**.001****	**.006****	.833	**.009****	**.037***	.293			
Tunisia	**.017***	.123	**.044***	.317	.145	**.028***	**.000****	**.000****		
UAE	.325	**.004****	**.014***	.822	**.019***	.066	.264	.894	**.000****	

Note: this table shows differences between selected Arab MENA countries regarding IFR_3; **= difference is significant at the 1% level; *= difference is significant at the 5% level.

Appendix 7.5- Panel C: Mann-Whitney Test for Country Variable (WEB_1)

	Bahrain	Egypt	Kuwait	Libya	Morocco	Oman	Qatar	Saudi	Tunisia	UAE
Bahrain										
Egypt	.783									
Kuwait	.954	.719								
Libya	.225	.188	.211							
Morocco	.750	.918	.703	.183						
Oman	.872	.541	.749	.239	.551					
Qatar	.062	**.027***	**.039***	.626	**.030***	.062				
Saudi	.076	**.006****	**.012***	.450	**.014***	**.046***	.413			
Tunisia	.358	.351	.221	.120	.480	.178	**.009****	**.001****		
UAE	.173	**.034***	.059	.406	.053	.141	.312	.714	**.009****	

Note: this table shows differences between selected Arab MENA countries regarding WEB_1; **= difference is significant at the 1% level; *= difference is significant at the 5% level.

Appendix 7.5- Panel D: Mann-Whitney Test for Country Variable (WEB_2)

	Bahrain	Egypt	Kuwait	Libya	Morocco	Oman	Qatar	Saudi	Tunisia	UAE
Bahrain										
Egypt	**.002****									
Kuwait	**.002****	.989								
Libya	**.004****	.097	.096							
Morocco	**.030***	.652	.654	.180						
Oman	**.015***	.991	1.000	.226	.692					
Qatar	**.035***	.516	.512	.628	.530	.638				
Saudi	**.002****	.088	.081	.512	.067	.120	.990			
Tunisia	**.020***	.870	.877	.210	.806	.891	.611	.111		
UAE	**.012***	.679	.668	.320	.481	.697	.775	.336	.627	

Note: this table shows differences between selected Arab MENA countries regarding WEB_2; **= difference is significant at the 1% level; *= difference is significant at the 5% level.

Appendix 7.6- Panel A: Binary Logistic Regression Analysis – Model C_1

	β	S.E	Sig.	Tolerance	VIF
Size (LNTA)	.854	.097	**.000****	.661	1.512
Profitability (LNROA)	.313	.110	**.004****	.771	1.298
Leverage (LNLEV)	.127	.071	.074	.844	1.185
Auditor	.558	.240	**.020***	.784	1.275
Sector			**.031***	.788	1.270
Sector (FIN)	.740	.322	**.022***		
Sector (SERV)	-.289	.293	.323		
Sector (REAEST)	.139	.425	.744		
Country			**.000****	.895	1.117
Country (BAH)	1.878	.718	**.009****		
Country (EGY)	-.274	.437	.530		
Country (KUW)	.193	.431	.654		
Country (LIB)	-2.775	1.053	**.008****		
Country (MOR)	.038	.481	.938		
Country (OMA)	1.183	.467	**.011***		
Country (QAT)	1.180	.896	.188		
Country (SAU)	.036	.456	.937		
Country (TUN)	-1.316	.560	**.019***		
Region	.924	.227	**.000****	.885	1.130
Constant	-9.163	1.051	**.000****		
Chi-square	269.657		**.000****		
Cox and Snell R square	.355				
Negelkerke R square	.490				
Correctly predicted: IFRC	88.3%				
Correctly predicted: N-IFRC	64.2%				
Overall correctly classified	80.0%				
Number of observations[98]	615				

Note: **P ≤ 0.01, and *P ≤ 0.05; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

[98.] Number of observations refers to the number of cases that were included in the analysis; the difference (346) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases.

Appendix 7.6- Panel B: Binary Logistic Regression Analysis – Model D_1

	β	S.E	Sig.	Tolerance	VIF
Size (LNMC)	.704	.091	**.000****	.822	1.217
Profitability (LNROE)	-.001	.110	.995	.954	1.049
Leverage (LNLEV)	.188	.064	**.003****	.952	1.050
Auditor	.496	.234	**.034***	.769	1.300
Sector			**.005****	.876	1.142
Sector (FIN)	1.000	.301	**.001****		
Sector (SERV)	-.016	.281	.954		
Sector (REAEST)	.255	.403	.526		
Country			**.000****	.898	1.113
Country (BAH)	1.424	.701	**.042***		
Country (EGY)	-.517	.428	.227		
Country (KUW)	-.303	.422	.472		
Country (LIB)	-2.328	.926	**.012****		
Country (MOR)	-.452	.477	.343		
Country (OMA)	.751	.456	.100		
Country (QAT)	.846	.882	.338		
Country (SAU)	-.420	.460	.361		
Country (TUN)	-1.565	.533	**.003****	.856	1.168
Region	.891	.222	**.000****		
Constant	-7.817	.923	**.000****		
Chi-square	233.070		**.000****		
Cox and Snell R square	.316				
Negelkerke R square	.437				
Correctly predicted: IFRC	87.3%				
Correctly predicted: N-IFRC	60.2%				
Overall correctly classified	78.0%				
Number of observations[99]	613				

Note: **P ≤ 0.01, and *P ≤ 0.05; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies

[99.] Number of observations refers to the number of cases that were included in the analysis; the difference (348) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases.

Appendix 7.7- Panel A: Binary Logistic Regression Analysis – Model E_1

	β	S.E	Sig.	Tolerance	VIF
Size (LNTA)	.865	.099	**.000****	.704	1.420
Profitability (LNROE)	.212	.113	.060	.966	1.035
Leverage (LNLEV)	.076	.069	.269	.899	1.112
Auditor	.593	.241	**.014***	.790	1.266
Sector			.077	.815	1.227
Sector (FIN)	.639	.323	**.048***		
Sector (SERV)	-.270	.295	.360		
Sector (REAEST)	.048	.427	.910		
Country			**.000****	.887	1.127
Country (BAH)	1.988	.721	**.006****		
Country (EGY)	-.253	.443	.567		
Country (KUW)	.205	.433	.635		
Country (LIB)	-3.921	1.175	**.001***		
Country (MOR)	-.081	.494	.869		
Country (OMA)	1.269	.474	**.007****		
Country (QAT)	1.260	.899	.161		
Country (SAU)	.094	.459	.837		
Country (TUN)	-1.605	.585	**.006****		
Region	1.066	.233	.000	.861	1.161
Conatant	-10.102	1.089	.000		
Chi-square	277.793		**.000****		
Cox and Snell R square	.365				
Negelkerke R square	.503				
Correctly predicted: IFRC	88.5%				
Correctly predicted: N-IFRC	67.0%				
Overall correctly classified	81.0%				
Number of observations[100]	612				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

[100.] Number of observations refers to the number of cases that were included in the analysis; the difference (349) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases.

Appendix 7.7- Panel B: Binary Logistic Regression Analysis – Model F_1

	β	S.E	Sig.	Tolerance	VIF
Size (LNMC)	.817	.098	**.000****	.835	1.197
Profitability (LNROA)	-.011	.108	.917	.811	1.233
Leverage (LNLEV)	.222	.071	**.002****	.862	1.160
Auditor	.550	.241	**.022***	.777	1.288
Sector			**.005****	.819	1.220
Sector (FIN)	1.017	.319	**.001****		
Sector (SERV)	-.120	.293	.683		
Sector (REAEST)	.379	.425	.373		
Country			**.000****	.897	1.115
Country (BAH)	1.590	.723	**.028***		
Country (EGY)	-.499	.443	.260		
Country (KUW)	-.293	.436	.501		
Country (LIB)	-2.447	.965	**.011***		
Country (MOR)	-.683	.488	.161		
Country (OMA)	.925	.469	**.049***		
Country (QAT)	1.753	1.154	.129		
Country (SAU)	-.521	.474	.272		
Country (TUN)	-1.926	.563	**.001****		
Region	1.015	.227	**.000****	.884	1.132
Constant	-8.806	.982	**.000****		
Chi-square	263.801		**.000****		
Cox and Snell R square	.352				
Negelkerke R square	.486				
Correctly predicted: IFRC	87.4%				
Correctly predicted: N-IFRC	62.9%				
Overall correctly classified	78.9%				
Number of observations[101]	608				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

[101.] Number of observations refers to the number of cases that were included in the analysis; the difference (353) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases.

Appendix 7.7- Panel C: Binary Logistic Regression Analysis – Model G_1

	β	**S.E**	**Sig.**	**Tolerance**	**VIF**
Size (TA)	.000	.000	**.000****	.890	1.124
Profitability (ROE)	.011	.004	**.005****	.934	1.071
Leverage	.022	.067	.741	.905	1.105
Auditor	.539	.167	**.001****	.833	1.201
Sector			**.023***	.855	1.169
Sector (FIN)	.511	.206	**.013***		
Sector (SERV)	-.134	.212	.528		
Sector (REAEST)	.128	.281	.649		
Country			**.001****	.876	1.142
Country (BAH)	1.123	.506	**.026***		
Country (EGY)	-.351	.315	.266		
Country (KUW)	-.135	.304	.657		
Country (LIB)	-6.577	4.812	.172		
Country (MOR)	-.479	.374	.200		
Country (OMA)	.099	.330	.763		
Country (QAT)	.757	.575	.188		
Country (SAU)	-.007	.317	.983		
Country (TUN)	-1.405	.454	**.002****		
Region	.634	.170	**.000****	.830	1.205
Constant	-1.177	.179	**.000****		
Chi-square	282.359		**.000****		
Cox and Snell R square	.257				
Negelkerke R square	.346				
Correctly predicted: IFRC	76.0%				
Correctly predicted: N-IFRC	65.6%				
Overall correctly classified	71.7%				
Number of observations[102]	950				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

[102.] Number of observations refers to the number of cases that were included in the analysis; the difference (11) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases.

Appendix 7.7- Panel D: Binary Logistic Regression Analysis – Model H_1

	β	**S.E**	**Sig.**	**Tolerance**	**VIF**
Size (MC)	.000	.000	**.000****	.947	1.056
Profitability (ROA)	.013	.007	.084	.901	1.110
Leverage	.096	.048	**.045***	.951	1.051
Auditor	.554	.165	**.001****	.822	1.216
Sector			**.000****	.839	1.192
Sector (FIN)	.809	.202	**.000****		
Sector (SERV)	-.043	.210	.838		
Sector (REAEST)	.301	.274	.271		
Country			**.001****	.882	1.134
Country (BAH)	.845	.498	.089		
Country (EGY)	-.531	.307	.083		
Country (KUW)	-.388	.293	.186		
Country (LIB)	-2.486	.964	**.010****		
Country (MOR)	-.772	.363	.033		
Country (OMA)	-.194	.319	.544		
Country (QAT)	.449	.573	.433		
Country (SAU)	-.474	.312	.129		
Country (TUN)	-1.347	.404	**.001****		
Region	.556	.166	**.001****	.820	1.219
Constant	-1.182	.177	**.000****		
Chi-square	230.696		**.000*****		
Cox and Snell R square	.216				
Negelkerke R square	.291				
Correctly predicted: IFRC	77.3%				
Correctly predicted: N-IFRC	61.7%				
Overall correctly classified	70.9%				
Number of observations[103]	948				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

[103.] Number of observations refers to the number of cases that were included in the analysis; the difference (13) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases.

Appendix 7.8- Panel A: Binary Logistic Regression Analysis – Model A_3

	β	S.E	Sig.	Tolerance	VIF
Size (LNTA)	.800	.164	**.000****	.671	1.491
Profitability (LNROA)	.317	.180	.079	.787	1.270
Leverage (LNLEV)	.281	.101	**.005****	.853	1.172
Auditor	.574	.430	.182	.797	1.255
Sector			.264	.793	1.261
Sector (FIN)	1.011	.572	.077		
Sector (SERV)	.083	.488	.865		
Sector (REAEST)	.767	.733	.295		
Country			.573	.885	1.130
Country (BAH)	.720	.963	.454		
Country (EGY)	.103	.768	.893		
Country (KUW)	.211	.741	.776		
Country (LIB)	17.225	20717.358	.999		
Country (MOR)	.444	.832	.594		
Country (OMA)	1.104	.833	.185		
Country (QAT)	18.264	6392.228	.998		
Country (SAU)	18.805	4542.682	.997		
Country (TUN)	-1.120	.899	.213		
Region	.787	.373	**.035***	.896	1.116
Constant	-8.920	1.720	**.000****		
Chi-square	113.247		**.000****		
Cox and Snell R square	.221				
Negelkerke R square	.450				
Correctly predicted: IFRC	98.0%				
Correctly predicted: N-IFRC	41.7%				
Overall correctly classified	92.1%				
Number of observations[104]	454				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

104. Number of observations refers to the number of cases that were included in the analysis; the difference (507) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases; or excluded because of the dependent variable (IFR_3) that excludes companies with a web site but do not have IFR.

Appendix 7.8- Panel B: Binary Logistic Regression Analysis – Model A4

	β	S.E	Sig.	Tolerance	VIF
Size (LNTA)	.496	.137	**.000****	.659	1.518
Profitability (LNROA)	.266	.159	.095	.777	1.287
Leverage (LNLEV)	.244	.084	**.004****	.846	1.182
Auditor	.316	.373	.397	.777	1.287
Sector			.615	.790	1.265
Sector (FIN)	.663	.541	.221		
Sector (SERV)	.108	.421	.797		
Sector (REAEST)	.460	.630	.465		
Country			.984	.901	1.110
Country (BAH)	-.287	.854	.737		
Country (EGY)	.154	.656	.815		
Country (KUW)	-.164	.642	.798		
Country (LIB)	18.436	11650.672	.999		
Country (MOR)	-.211	.691	.760		
Country (OMA)	.500	.713	.483		
Country (QAT)	17.737	6655.888	.998		
Country (SAU)	18.227	4296.213	.997		
Country (TUN)	-.281	.735	.702		
Region	.290	.332	.383	.883	1.132
Constant	-4.583	1.439	**.001****		
Chi-square	70.458		**.000****		
Cox and Snell R square	.108				
Negelkerke R square	.256				
Correctly predicted: IFRC	99.8%				
Correctly predicted: N-IFRC	6.3%				
Overall correctly classified	92.6%				
Number of observations[105]	618				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

105. Number of observations refers to the number of cases that were included in the analysis; the difference (343) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values.

Appendix 7.8- Panel C: Binary Logistic Regression Analysis – Model A_5

	β	**S.E**	**Sig.**	**Tolerance**	**VIF**
Size (LNTA)	.056	.159	.725	.811	1.234
Profitability (LNROA)	.123	.173	.476	.750	1.334
Leverage (LNLEV)	.235	.096	**.014***	.832	1.203
Auditor	-.070	.382	.854	.932	1.073
Sector			.984	.896	1.116
Sector (FIN)	.068	.595	.909		
Sector (SERV)	.046	.463	.922		
Sector (REAEST)	.258	.650	.691		
Country			1.000	.938	1.066
Country (BAH)	-22.453	23174.420	.999		
Country (EGY)	.091	.691	.895		
Country (KUW)	-.308	.703	.661		
Country (LIB)	19.682	14709.648	.999		
Country (MOR)	-.293	.756	.698		
Country (OMA)	-.139	.778	.858		
Country (QAT)	20.369	28106.192	.999		
Country (SAU)	19.868	9685.032	.998		
Country (TUN)	-.224	.767	.770		
Region	-.045	.349	.898	.927	1.079
Constant	-1.210	1.646	.462		
Chi-square	31.358		**.012***		
Cox and Snell R square	.139				
Negelkerke R square	.211				
Correctly predicted: IFRC	98.8%				
Correctly predicted: N-IFRC	14.6%				
Overall correctly classified	79.5%				
Number of observations[106]	210				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

106. Number of observations refers to the number of cases that were included in the analysis; the difference (751) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values or excluded because of the dependent variable (WEB_2) that excludes companies with a web site and IFR.

Appendix 7.8- Panel D: Binary Logistic Regression Analysis – Model B_3

	β	S.E	Sig.	Tolerance	VIF
Size (LNMC)	.744	.154	**.000****	.820	1.220
Profitability (LNROE)	.047	.202	.817	.940	1.064
Leverage (LNLEV)	.362	.097	**.000****	.953	1.050
Auditor	.493	.435	.257	.783	1.278
Sector			.160	.878	1.140
Sector (FIN)	1.233	.574	**.032***		
Sector (SERV)	.208	.488	.670		
Sector (REAEST)	.696	.710	.326		
Country			.249	.884	1.131
Country (BAH)	.432	.933	.643		
Country (EGY)	-.134	.758	.860		
Country (KUW)	-.208	.720	.773		
Country (LIB)	17.401	21359.640	.999		
Country (MOR)	-.116	.824	.888		
Country (OMA)	.859	.807	.287		
Country (QAT)	17.954	6441.731	.998		
Country (SAU)	18.345	4563.646	.997		
Country (TUN)	-1.967	.901	**.029***		
Region	.942	.385	**.015***	.862	1.160
Constant	-7.712	1.574	**.000****		
Chi-square	110.715		**.000****		
Cox and Snell R square	.219				
Negelkerke R square	.443				
Correctly predicted: IFRC	97.8%				
Correctly predicted: N-IFRC	33.3%				
Overall correctly classified	90.9%				
Number of observations[107]	449				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

107. Number of observations refers to the number of cases that were included in the analysis; the difference (512) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values, outliers, or influential cases; or excluded because of the dependent variable (IFR_3) that excludes companies with a web site but do not have IFR.

Appendix 7.8- Panel E: Binary Logistic Regression Analysis – Model B_4

	β	S.E	Sig.	Tolerance	VIF
Size (LNMC)	.503	.135	**.000****	.821	1.217
Profitability (LNROE)	.067	.176	.705	.954	1.049
Leverage (LNLEV)	.283	.080	**.000****	.953	1.049
Auditor	.314	.372	.399	.769	1.301
Sector			.506	.877	1.140
Sector (FIN)	.766	.531	.149		
Sector (SERV)	.158	.422	.709		
Sector (REAEST)	.446	.620	.472		
Country			.928	.898	1.113
Country (BAH)	-.294	.843	.727		
Country (EGY)	.054	.647	.933		
Country (KUW)	-.332	.634	.600		
Country (LIB)	18.450	11810.854	.999		
Country (MOR)	-.421	.691	.542		
Country (OMA)	.503	.704	.475		
Country (QAT)	17.645	6595.241	.998		
Country (SAU)	17.989	4286.798	.997		
Country (TUN)	-.567	.730	.437		
Region	.382	.339	.260	.856	1.169
Constnat	-4.091	1.336	**.002****		
Chi-square	70.373		**.000****		
Cox and Snell R square	.109				
Negelkerke R square	.257				
Correctly predicted: IFRC	99.8%				
Correctly predicted: N-IFRC	6.3%				
Overall correctly classified	92.5%				
Number of observations[108]	612				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

108. Number of observations refers to the number of cases that were included in the analysis; the difference (349) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values.

Appendix 7.8- Panel F: Binary Logistic Regression Analysis – Model B_5

	β	**S.E**	**Sig.**	**Tolerance**	**VIF**
Size (LNMC)	.083	.158	.600	.954	1.048
Profitability (LNROE)	.061	.181	.737	.932	1.073
Leverage (LNLEV)	.221	.091	**.015***	.941	1.063
Auditor	-.095	.383	.804	.930	1.075
Sector			.989	.938	1.066
Sector (FIN)	.044	.575	.939		
Sector (SERV)	.050	.463	.915		
Sector (REAEST)	.226	.648	.727		
Country			1.000	.924	1.082
Country (BAH)	-22.288	23170.326	.999		
Country (EGY)	.172	.690	.803		
Country (KUW)	-.249	.704	.724		
Country (LIB)	19.772	14695.022	.999		
Country (MOR)	-.250	.763	.743		
Country (OMA)	.011	.779	.989		
Country (QAT)	20.342	27837.377	.999		
Country (SAU)	19.928	9689.905	.998		
Country (TUN)	-.181	.769	.814		
Region	-.012	.357	.973	.886	1.129
Constant	-1.230	1.500	.412		
Chi-square	31.148		**.013***		
Cox and Snell R square	.138				
Negelkerke R square	.210				
Correctly predicted: IFRC	99.4%				
Correctly predicted: N-IFRC	14.6%				
Overall correctly classified	79.9%				
Number of observations[109]	209				

Note: **= $p \leq 0.01$ and *= $p \leq 0.05$; S.E= standard error, Sig. = significance; FIN= Financial; SERV= Services; REAEST= Real Estate; BAH= Bahrain; EGY= Egypt; KUW= Kuwait; LIB= Libya; MOR= Morocco; OMA= Oman; QAT= Qatar; SAU= Saudi; TUN= Tunisia; IFRC= Internet Financial Reporting Companies; and N-IFRC= Non Internet Financial Reporting Companies.

109. Number of observations refers to the number of cases that were included in the analysis; the difference (752) between this number and the original number of cases (961) presents cases that were excluded from the analysis because they have missing values or excluded because of the dependent variable (WEB_2) that excludes companies with a web site and IFR.